REVIEW OF EDUCATIONAL RESEARCH

Official Publication of the American Educational Research Association.

Contents are listed in the Education Index.

Copyright, 1944

By National Education Association of the United States, Washington, D. C.

Vol. XIV, No. 4

October 1944

285

Education for Work and for Citizenship

Reviews the literature for the three-year period since the issuance of Volume XI, No. 3, October 1941.

TABLE OF CONTENTS

	age 287

Foreword	288
I. General Education and Work Experience Howard Y. McClusky, University of Michigan, Ann Arbor, Michigan	289
II. Home and Family Life Education HESTER CHADDERDON, Iowa State College, Ames, Iowa	301
III. Industrial Education John A. Whitesel, Miami University, Oxford, Ohio	311
IV. Commercial Education Agnes E. Osborne, College of the City of New York, New York	320
V. Agricultural Education	327
VI. The Social Studies Howard R. Anderson, Cornell University, Ithaca, New York; Beatrice M. Shufelt, Public Schools, Ithaca, New York; Elaine Forsyth, New York State College for Teachers, Albany, New York; and Harriet C. Stull, University School, Bloomington, Indiana	337
VII. Trends in Social Education WILBUR F. MURRA, Civic Education Service, Washington, D. C.; HOWARD E. WILSON, Harvard University, Cambridge, Massachusetts; and Merrill F. Hartshorn, National Council for the Social Studies, Washington, D. C.	348
Index	362

This issue of the Review was prepared by the Committee on Education for Work and for Citizenship

Howard R. Anderson, Chairman, Cornell University, Ithaca, New York

Hester Chadderdon, Iowa State College, Ames, Iowa

Howard Y. McClusky, University of Michigan, Ann Arbor, Michigan

John A. Whitesel, Miami University, Oxford, Ohio

Howard E. Wilson, Harvard University, Cambridge, Massachusetts

ci

E

m

te m

with the assistance of

ELAINE FORSYTH, New York State College for Teachers, Albany, New York
MERRILL F. HARTSHORN, National Council for the Social Studies, Washington, D. C.
WILBUR F. MURRA, Civic Education Service, Washington, D. C.
AGNES E. OSBORNE, College of the City of New York, New York
BEATRICE M. SHUFELT, Public Schools, Ithaca, New York
WILLIAM A. SMITH, Cornell University, Ithaca, New York

HARRIET C. STULL, University School, Bloomington, Indiana

INTRODUCTION

This issue of the Review includes chapters which substantially parallel sections included in the issue of October 1941: "Commercial Education," "Home and Family Life Education," "Industrial Education," and the "Social Studies." There are included for the first time chapters on "General Education and Work Experience," and "Agricultural Education."

In planning the present cycle of the REVIEW, the editorial board had in mind an issue which would retain the applied arts and social studies content of the October 1941 issue, and encouraged a somewhat broader treatment of these two areas by substituting the words "work" and "citizenship" for "vocational" and "social studies." The board had hoped that the Committee would be able to provide an integrated discussion of "Education for Work and for Citizenship" which included not only the elements just mentioned, but also a consideration of general education, as well as aspects of character education, adult education, and problems of youth.

The Committee has not performed this assignment in its entirety. For example, this issue of the Review obviously does not treat the subject of adult education. But, even tho the chapter headings seem traditional, the Committee believes that it has gone part of the way in effecting the changes implied in the title. Perhaps the transition can be made more completely

three years from now.

HOWARD R. ANDERSON, Chairman, Committee on Education for Work and for Citizenship

FOREWORD

The organization of a cycle of the Review of Educational Research should be sensitive to the trends in educational research. The title of this issue suggests one of the significant trends in the literature of educational research during the last half-dozen years. The publications of the American Youth Commission and of the National Youth Administration brought education for work and education for citizenship into a new perspective. The points of view embodied in the research of these two agencies was reflected in the work of many individuals and of committees. One of the more significant of these was the Regents Inquiry into the Character and Cost of Public Education in the State of New York. The concepts expressed in the Inquiry's reports on Education for Work and Education for Citizenship have found their way into the thinking of people thruout the United States.

This issue of the REVIEW at least raises the question as to whether educational research may not break beyond the confines of the traditional organization of knowledge by subjects, whether educational research should not be focused on issues that reach beyond the limits of any particular sub-

ject in the curriculum of school or college.

Not later than March 1 next the editorial board must determine the organization of the sixth cycle of the Review. The board would welcome suggestions from members, contributors, and readers of the Review as to the organization that would serve best the interests of education.

J. CAYCE MORRISON

CHAPTER I

General Education and Work Experience

HOWARD Y. McCLUSKY

In spite of the fact that "general education" is as old as the "common school" it is only in recent years that the term has accumulated a unique connotation. An examination of the literature revealed a struggle on the part of various writers to formulate a precise and comprehensive definition (27:6, 60). In fact Russell (73: 176-83) required seven printed pages to report the definitions received from twenty-two colleges and used three diffuse paragraphs in an attempt to compose a "majority opinion."

Nevertheless the term is attaining some focus. In discussing secondary education, Johnson (48:xii) proposed the following interpretation:

General education is general in at least three respects:

First, general education is intended for everyone—not merely for the select few

who become scholars or who enter the professions.

Second, general education is concerned with the total personality—not merely with the intellect but with emotions, habits, attitudes. . . . General education programs must be defined in terms of what the learner is or does rather than in terms of course content or a body of knowledge.

Third, general education is concerned with the individual's non-specialized activities. It consists of preparation for efficient living, no matter what one's vocation.

Admitting a diversity of viewpoint, Eurich (19:6-7) wrote:

Fundamentally, however, there is a common concern that underlies all efforts to stress general education in the upper secondary and higher levels regardless of the different emphases. It is a concern that grows out of (a) a dissatisfaction with higher education as now organized, (b) a reaction against an overemphasis upon specialization in the colleges, (c) a new body of information regarding the nature of a college and the characteristics of the student body, (d) the current youth problem in society, and (e) a deepened desire to do something that will make education more effective than it has been in the past.

After a discriminating analysis of general education at the college level, Benezet (5:28) summarized as follows:

... general education came into the college program to give a vastly increased enrollment of unspecialized students some extension of their high school learning; it has been variously designed to cover almost anything except specialized and vocational training; and it is variously believed to be most effective when allied with liberal-education values, when it is broad in scope or implication, and when it is somehow related to the culture in which learners, teachers, and their college live.

On all fronts and at all levels general education is counteraction against the fragmentation of the curriculum. The following words of MacLean and Coffman with respect to the General College at the University of Minnesota could be applied with equal relevance to the elementary and secondary schools.

00

The first problem, wrote MacLean (17:vii), which led to the establishment of the General College was:

The long-time and powerful tendency in higher education for the curriculum to grow like a cancer, by a process of cell division with no powers of elimination. . . . In the General College, therefore, we were to see what we could do experimentally to synthesize the many fragments of learning into an effective general education.

Eurich (19:7) concluded that:

Every program of general education . . . stresses the need for integration . . . some sort of unity now lacking in educational matters.

The trend expressed by the preceding statements accounts for the appearance in recent years of such terms as "unified studies," "integrated courses," "stem courses," "core courses," "fused courses," "social living courses," "and basic courses" (27:33). According to Giles, McCutchen, and Zechiel the preceding courses have the following elements in common.

First, they cut across subject matter lines; second, they frequently call for cooperative planning and teaching; third, they call for exploration of a wide range of relationships; fourth, they provide for experiences valid for large groups; fifth, they deal with subject matter which does not require extended drill in specific skills (such as the operations involved in mathematics, or the writing of chemical equations); sixth, they use larger blocks of time than a single period; and seventh, they use a wide range of source materials, techniques of gathering information and classroom activities (27: 33-34).

After examining a bewildering array of programs of general secondary education, Mackenzie noted the following basic points in common:

First, the school's task is defined in terms of social functionalism and the full development of the individual; second, learning experiences are designed to develop self-direction; third, appropriate attitudes and skills are recognized as essentials of democratic living; fourth, aims are formulated which are broader than any subject field; fifth, it is recognized that more than one thing is learned at a time; sixth, a wider variety of learning experiences is used than formerly; seventh, various aspects of the program are unified into broader or core courses; eighth, students take a greater part in organizing, clarifying and evaluating their experiences; ninth, a greater continuity of learning experiences is provided; tenth, evaluation is made in terms of behavior and is used as an integral part of the instructional program (57: 84-91).

Selected Attempts at Synthesis

An effective synthesis of proliferating fragments of instruction requires some classification of educational areas. Frederick and Farquear (26) listed forty-four classifications embracing 356 different areas of human activity. Using the "needs approach" the Commission on the Secondary School Curriculum of the Progressive Education Association (78) proposed four areas of need: (a) immediate social relationships, (b) wider social relationships, (c) economic relationships, and (d) personal living. These areas should be experienced under the guidance of the democratic ideals of respect for the value of the individual, reciprocal individual, and group responsibility for common goals; the free play of intelligence in the solution

of common problems by personalities possessing tolerance, cooperativeness, skill in reflective thinking, social sensitivity, creativeness, self-direction, and esthetic appreciation. Certainly this is an inclusive program for general education.

Stephens (Junior) College (49:128-30) has grouped its program into seven areas of activity common to all women, in or outside the home, single or married: (a) communication, (b) appreciation of the beautiful, (c) social adjustment, (d) physical health, (e) mental health, (f) consumers' problems, (g) philosophy of living. Heaton and Koopman (35:24-26), reporting an extensive cooperative effort to achieve a college curriculum based on the functional needs of students, outlined four areas of relationships: (a) social, (b) family, (c) personal, and (d) vocational, with the following needs in each area: (a) the ability to meet life situations, (b) knowledge and understanding, and (c) appreciation of worth or value.

The program of the General College at the University of Minnesota (58:150-52) embraces the following categories: (a) personal life orientation, (b) home and family life orientation, (c) general vocational orientation, and (d) social and civic orientation. Wriston (84) proposed four "disciplines" as a basis for general education: (a) precision. (b) appreciation, (c) opinion (hypothesis), and (d) reflective synthesis. The most definitive and comprehensive attempt at synthesis of educational objectives undertaken in recent years is the report of the Educational Policies Commission (65). This body offers forty-three goals under the objectives of (a) self-realization, (b) human relationship, (c) economic efficiency, and (d) civic responsibility. Extensive and critical reviews of literature related to this field are contained in the REVIEW OF EDUCATIONAL RESEARCH for June 1942, and by Frederick (25) and Giles, McCutchen, and Zechiel (27). Intensive discussions of language, mathematics, science, and social studies in general education are contained in four valuable reports of the Progressive Education Association (71), while Gray and others (30) present an extensive investigation of reading in general education.

Nonquantitative Studies of General Education

Everett (22) interpreted the programs of (a) Wells High School, (b) Shorewood, Wisconsin, (c) Eugene, Oregon, (d) Carpinteria Union High School, California, (e) Collinwood High School, Cleveland, and (f) Moultrie, Georgia. He said that in a growing number of high schools thruout the country "general education is no longer just a blueprint . . . it is an accomplished fact."

Johnson (49) discussed general education in junior college with illustrative material from Pasadena Junior College, Stephens College, and the University of Chicago. MacLean, Little, and Works (58) presented interpretations of the University of Wisconsin Experimental College, the College at the University of Chicago, and the General Colleges at the Universities of Minnesota and Florida. Cottrell (11) appraised the programs of six experi-

Oct

tio

of

tl

ti

mental liberal arts colleges: (a) Reed, (b) Sarah Lawrence, (c) Bennington, (d) Black Mountain, (e) Bard, and (f) St. John's. MacGrath and others (55) presented brief sketches of general education in professional education, and Bigelow (6) described programs of general education in teacher education at Colorado State College of Education, Central State Teachers College (Michigan), and at New College, Teachers College, Columbia University. The most extensive report of the Experimental College at the University of Wisconsin was composed by Meiklejohn (62), the director of the college during its limited existence.

Benezet (5) made a careful study of general education in the progressive college, combining a critical review of the literature with a careful examination of the (a) primary aims, (b) the course and method of study, (c) evaluation and control, and (d) admission policies of Sarah Lawrence, Bard, and Bennington Colleges. Interviews with selected members of the staff of each college were an important feature of his procedure.

Another document of great relevance for the field of general education was composed by a committee of the American Council of Learned Societies (31). The report was extensively criticized and revised prior to publication and contains a constructive effort to develop a definitive statement of the values which the humanities may contribute to elementary, secondary, collegiate, and graduate education.

Quantitative Studies of General Education

An extensive and influential examination of general education in selected high schools and colleges of Pennsylvania by Learned and Wood (51) revealed a great variability both within and among institutions with respect to the amount of knowledge acquired by students. Some of the results were shocking. Many college graduates were no better informed than many high-school students, and almost one-sixth lost ground academically during a two-year trial period.

A more encouraging report comes from an appraisal of a program of general education conducted cooperatively by trustees, faculty, and students at Bennington. Eurich (20) in describing the inquiry said that the evidence for the most part justified the assumption under which the college is operating. Eurich (21) also presented a valuable summary of the status of evaluation in general education in colleges up to 1942. Tyler and McLaughlin (80) reported the results of a questionnaire study of twenty-six public junior colleges in California during the year 1939-40. They found (a) no single program of general education, (b) little attempt to evaluate existing programs, (c) good programs are the exception not the rule, and (d) a need for someone to coordinate and encourage the work in general education in the public junior colleges of California.

The evaluation committee of the Wright Junior College, Chicago, recently published an appraisal of terminal general education in that institution. On the bases of an extensive use of standardized tests the committee con-

cluded that students taking courses of the general integrated type did somewhat better than students who presumably had taken courses of the tradi-

tional type (10:145).

The most ambitious quantitative research in the field comes from the General College at the University of Minnesota. The committee on educational research reported the extent to which standardized objective examinations measured the outcomes of instruction in nine of the ten areas of instruction in the General College curriculum (9). Pace (70) conducted an interview and questionnaire study of nearly a thousand former students of the University of Minnesota in order to know more clearly the problems, interests, and activities of young people ten or fifteen years after they

have left college.

Another investigation was made of 1300 students enrolled in the General College in 1935-36 supplemented with intensive case studies of fifty men and fifty women students (83). These studies showed, among other things, that the students were nonacademic, largely conservative, and had unrealistic vocational goals. The results were useful in guiding the development of the program of the General College interpreted by Spafford and others (76). Spafford and her colleagues elaborated the purposes of the General College in relation to the curriculum and described the courses in the various subject areas. The outcomes of the General College were detailed by Eckert (17) in eleven tables and twenty-nine figures. In general she concluded that the summary picture of the outcomes is a favorable one. Despite an average stay in college of only one year, the student comes to like it, performs well academically, and attributes real values to its curriculum and its counseling service. "That so many positive outcomes are apparent after a single year's residence seems highly significant" (17:205). Eckert also referred to a number of ways in which the General College at Minnesota influenced the rest of the University.

Work Experience and General Education

The observations of William James (47) showed that the educational value of work experience is not new with this generation, but the depression of the 1930's and the increasing urbanization of society have given rise to a growing interest in work experience as a phase of general education.

Public Youth Work Programs

The National Youth Administration and the Civilian Conservation Corps (2:39-41) were created by the federal government largely as a relief for the extensive unemployment of youth, but in spite of their termination have had important repercussions on general education. A quantitative survey and critical appraisal of the National Youth Administration was prepared for the Advisory Committee on Education by Johnson and Harvey (50). Jacobson (44, 45) edited two Bulletins of the National Association of Sec-

Oc

Ch

ci

fi

ondary-School Principals containing critical discussions of work experience and descriptions of successful examples of the NYA student-aid programs. He presented similar materials in the report of the General Education Committee of the North Central Association (46).

The educational program of the Civilian Conservation Corps was studied by Harby (34) and Hill (37). Holland and Hill (42) reported the results of an extensive interview and testing program. They also described the procedure and outcome of an elaborately controlled experiment designed to determine the effectiveness (42:148-81) of a work-study program. Ten camps were selected for the control group and ten camps for the experimental group. The test data showed a definite superiority for enrollees following an integrated work-study program as compared with enrollees who worked without study, or who pursued studies unrelated to their work. The general conclusion of the investigation led to important changes in the educational and work policy of the Civilian Conservation Corps. A significant over-all study of the problems and policies of public youth work programs was prepared for the American Youth Commission by Lorwin (53). While more exploratory than definitive, the quantitative character of his research is exhibited in the forty-two tables which appear in the text and appendix. Since various European countries had been experimenting with public work programs, Holland investigated European labor camps in 1936 and submitted a report on his findings to the American Youth Commission (38).

Private Youth Work Programs

In the public work programs relief from unemployment rather than education was the primary objective. But for several years the private work camp movement has been developing into an enterprise of major educational significance. In this case educational experience, not work for wages or vocational training, was the major objective. While not yet the subject of research or extensive publication, the largest body of experience in this field has grown out of the programs of the American Friends Service Committee. The Associated Junior Work Camps, the Lincoln School, George School, Ethical Culture Schools, and Progressive Education Association have developed similar programs. The best studies of these projects were reported by Holland (39) and Holland and Bickel (41). Other valuable descriptions of programs in this field were offered by Gothe (28), Holland (40), Munzer (63), Munzer and Robinson (64), Robinson (72), and Sharpe and Osborne (75). The youth hostel (32) is a related program.

Studies of Deliberative Commissions

The 1941 Harvard Workshop in Education under the leadership of Seyfert and Rehmus (74) prepared a report on work experience in education summarizing the deliberation of twenty-three school administrators who had had successful experience with the school work program of the National Youth Administration. The checklist for evaluating work experience contained in

Chapter 6 of this report is an important contribution to the technic of research in the field.

The National Committee on Coordination in Secondary Education of the National Association of Secondary-School Principals gave a prominent place to work experience and carefully defined the relation of the federal government to a work program for youth. A significant feature of this report is the emphasis placed on the formation of community youth councils whereby the contributions of all lay and professional youth-serving agencies may be coordinated at the local level (59). An important series of studies has come from the California Joint Committee on Work Experience. In symposium form the members of the Committee summarized their findings concerning work experience practices in California, a philosophy of work experience, the legal aspects of credit for work experience, the administration of a work experience program, and the educational implications of work experience (13, 16, 68, 69, 77, 82). While the Educational Policies Commission gave major attention to an evaluation of the federal youth work programs (CCC and NYA) and their relationship to the public schools, it supported the viewpoint that work experience has important educational value (66).

The most definitive statement concerning the role of work experience in general education has come from a special committee appointed by the American Youth Commission at the request of the American Council on Education. Part of this statement deserves quotation:

Young people need to learn to work. . . . There is no factor of general education which is more important to consider than work. This statement should . . . be ac-

cepted as a principle of the widest possible application. .

The foregoing paragraphs must not be interpreted as advocating work in the curriculum merely because it contributes to economic adjustment. There are valid educational reasons for advocating a work program as an essential part of the curriculum. . . . Reading and labor . . . are units in a program of . . . education which can . . . supplement each other very advantageously (1: 15-21).

The Need for Research in the **Educational Value of Work Experience**

There appears to be almost universal agreement concerning the educational values of work experience, but vastly more must be known in order to identify those values and embody them in successful educational programs. One problem is the effective integration of work and verbal experience. Another is the identification and distribution of individual differences in work experience. To illustrate, the work experience of rural youth differs radically from the work experience of urban youth. A third problem relates to appraisal. When is work experience educative and when, exploitation? Other problems are suggested by the following questions: 1

1. Should work experience always involve the production of useful goods and sources?

¹ In the formulation of the above questions the writer was assisted by Leo P. Black, supervisor of secondary education, Nebraska Department of Public Instruction, Lincoln, Nebraska.

cu

tic

di

bi

P

R

2. To what extent does work experience yield values which are either not provided, or not provided as well, by other phases of the educational program?

3. Should work experience include only activities which are socially desirable?
4. How much and what kind of supervision of work experience will yield the greatest educational value?

5. To what extent should work experience be carried on under conditions normal to the activity involved?

6. Should work experience have an intellectual as well as a physical component?
If so, how should they be related?

7. Should work experience receive credit toward graduation?

8. Should achievement in work experience be graded and receive special recognition?
9. What are the relative responsibilities of the home, school, community, state.

and nation in providing work experience?

10. How shall the length of time for participation in work experience be determined?
11. What legal requirements must be observed in the administration of work programs?

The Need for Research in General Education

The problem of general education is too important to rest with the amount of research (good as far as it goes) that now exists. In spite of the catalytic influence which the Experimental College at the University of Wisconsin (62) has had on general education in the United States, the almost complete absence of quantitative studies of that enterprise is a great loss to American education. It is also very unfortunate that New College of Teachers College, Columbia University, (6) was allowed to fade from the academic scene with such a meager record of its origin, rise, and demise. This reviewer hopes that St. John's College will not repeat these mistakes of New College and the University of Wisconsin, and strongly urges that general education everywhere and at every level strive to equal or exceed the standard for research and evaluation set by the General College at the University of Minnesota (9, 17, 70, 76).

As a guide for further investigation the five basic issues proposed by Cottrell (11) might be cited.

1. How should . . . education deal with the contrasting claims of the experience of security in the mastery of some precise knowledge or skill . . . , and the achievement of well-founded perspective or broad understanding of relationships in life. . . ?

2. How should . . . education deal with the contrasting necessities of adequate career or vocational preparation . . . , and of the cultivation of adequate intellectual interests and powers to cope with life in a world of perplexity . . . ?

3. How should the emphasis be placed, or the synthesis wrought, in . . . education, as between the individual character of all educational processes . . . , and the social foundation and purpose of all education . . . ?

4. How should . . . education make use of the accumulated heritage of the race, as well as the distinctive setting of conditions and forces that define a problem today?

5. In what degree should the educational process . . . be controlled in order to keep it centered in the school itself as a strategic social institution, and in what degree should it be thought of as flowing into, and through the community?

The reviewer would also like to urge that future workers in the field go further in relating the problem of general education to the integration of American society. It may be that the trend toward fragmentation in the

curriculum is significantly linked with the trend toward excessive specialization in modern civilization which, if unchecked, may pave the way for the disintegration of society. The viewpoint of social philosophy may give a broader and more realistic perspective for leaders in general education (4). Perhaps the publications of the Cooperative Study in General Education, Ralph W. Tyler, University of Chicago, chairman (56), which have not appeared in time for inclusion in this study, will throw light on these problems.

Bibliography

- 1. AMERICAN YOUTH COMMISSION. What the High Schools Ought to Teach. Washington, D. C.: American Council on Education, 1940. 36 p.
 2. American Youth Commission. Youth and the Future. Washington, D. C.: Ameri-
- can Council on Education, 1942. 296 p.
 3. Andree, Robert G. "Six Errors about Work Experience." Clearing House 16:518-20;
- May 1942.
- Angell, Robert C. The Integration of American Society. New York: McGraw-Hill Book Co., 1941. 228 p.
 Benezet, Louis T. General Education in the Progressive College. Contributions to
- Education, No. 884. New York: Teachers College, Columbia University, 1943.
- BICELOW, KARL W. "General Education and Teacher Education." General Educa-tion in the American College. Thirty-Eighth Yearbook, Part II. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co.,
- BLACK, MAX. "What Is General Education?" Journal of Higher Education 15: 117-21; March 1944.
- CARMICHAEL, OLIVER C. "Liberal Arts vs. General Education." Southern Association Quarterly 5: 242-50; March 1941.
- 9. COMMITTEE ON EDUCATIONAL RESEARCH. The Effective General College Curriculum.
- Minneapolis: University of Minnesota Press, 1943, 427 p.

 10. Conley, William H., and others. The Wright Junior College Study of Terminal General Education. Chicago: Evaluation Committee, Wright Junior College,
- 11. COTTRELL, DONALD P. "General Education in Experimental Liberal Arts Colleges."

 General Education in the American College. Thirty-Eighth Yearbook, Part II. National Society for the Study of Education. Bloomington, Ill.: Public School
- Publishing Co., 1939.

 12. Cowley, William H. "Ninety Year Old Conflict Erupts Again." Educational Record 23: 192-218; April 1942.

 13. Cross, Henry A. "Activities of the Committee on Work-Experience." California
- Journal of Secondary Education 17: 331-33; October 1942.
- CROSS, HENRY A. "Work Experience in Secondary Schools." Bulletin of the National Association of Secondary-School Principals 26: 36-43; March 1942.
 DOUGLASS, AUBREY A. "San Francisco Experiments with Student Work Camps."
 California Journal of Secondary Education 18: 217-23; April 1943.

 DOUGLASS, AUBREY A. "Legal Aspects of Credit for Work." California Journal of
- Secondary Education 17: 346-51; October 1942.
- 17. ECKERT, RUTH E. Outcomes of General Education. Minneapolis: University of Minnesota Press, 1943. 210 p.

 18. Eurich, Alvin C. "Some General Implications for General Education." California
- Journal of Secondary Education 76: 149-52; March 1941.
- EURICH, ALVIN C. "A Renewed Emphasis Upon General Education." General Education in the American College. Thirty-Eighth Yearbook, Part II. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1939.
- EURICH, ALVIN C. Evaluation Study. Bennington College Bulletin, News of the Year 1939-40, Vol. 8, No. 4, June 1940.

Oct

47.

49.

50.

51 52

53

5

- 21. EURICH, ALVIN C. "Evaluation of General Education in Colleges," Journal of Edu-
- cational Research 35: 503-17; March 1942.

 22. EVERETT, SAMUEL. "General Education Works from Chicago to Moultrie, from Carpenteria to Cleveland." General Education in the American High School. North Central Association of Colleges and Secondary Schools. Chicago: Scott, Foresman and Co., 1942. p. 188-229.

 23. FISHER, DOROTHY C. Our Young Folks. New York: Harcourt, Brace and Co., 1943.
- 24. FRASER, MOWAT G. The College of the Future. New York: Columbia University
- Press, 1937. 483 p.

 25. Frederick, Orie I. "Curriculum Development." Encyclopedia of Educational Research. New York: Macmillan Co., 1941. p. 373-83.

 26. Frederick, Orie I., and Farquear, Lucile J. "Problems of Life." School Review 46: 337-45, 415-22; May and June 1938.
- 27. GILES, HARRY H.; McCUTCHEN, S. P.; and ZECHIEL, A. NORRIS. Exploring the Curriculum. Progressive Education Association. Committee on the Relation of School
- and College. New York: Harper and Brothers, 1942. 362 p.
 28. GOTHE, RICHARD. "Taking Stock of a Work Camp for Democracy." Progressive Education 16: 496-501; November 1939.
- 29. Gray, William S., editor. General Education: Its Nature, Scope, and Essential
- Elements. Chicago: University of Chicago Press, 1934, 188 p.
 30. Gray, William S., and others. Reading in General Education. Washington, D. C.:
- GRAY, WILLIAM S., and OTHERS. Reading in General Education. Washington, D. C.:
 American Council on Education, 1940. 464 p.
 GREENE, THEODORE M., and OTHERS. Liberal Education Re-examined, Its Role in a Democracy. New York: Harper and Brothers, 1943, 134 p.
 GRODMAN, EDNA V. "American Youth Hosteling: What It Means for Education and Schools." Progressive Education 17: 262-69; April 1940.
 HANNA, PAUL. Youth Serves the Community. New York: D. Appleton-Century Co., 1962-2022.
- 1936. 303 p.
- 34. HARBY, SAMUEL F. A Study of Education in the Civilian Conservation Corps Camps of the Second Corps Area. April 1933-March 1937. Ann Arbor, Mich.: Edwards Brothers, 1938.
- 35. HEATON, KENNETH L., and KOOPMAN, G. ROBERT. A College Curriculum Based on Functional Needs of Students. An Experiment with the General Curriculum at Central State Teachers College, Mount Pleasant, Michigan. Chicago: University of Chicago Press, 1936. 157 p.
- 36. HeIL, Louis M. "Workshop Proposal for Continuous General Education at the College Level," Educational Record 23: 261-70; April 1942.
 37. HILL, FRANK E. The School in the Camps. New York: American Adult Education
- Association, 1935. 84 p.
- 38. HOLLAND, KENNETH. Youth in European Labor Camps. American Youth Commission. Washington, D. C.: American Council on Education, 1939. 303 p.
- Holland, Kenneth. Work Camps for College Students. American Youth Commission. Washington, D. C.: American Council on Education, 1941. 32 p.
 Holland, Kenneth. "The Implications of Work Camps for Secondary Education."
 Bulletin of the National Association of Secondary-School Principals 24: 29-42; April 1940.
- 41. HOLLAND, KENNETH, and BICKEL, GEORGE L. Work Camps for High School Youth.

 American Youth Commission. Washington, D. C.: American Council on Edu-
- 42. HOLLAND, KENNETH, and HILL, FRANK E. Youth in the CCC. American Youth
- Commission. Washington, D. C.: American Council on Education, 1942. 263 p. 43. Hoskyn, S. P. "The Idea of Work Experience." Bulletin of the National Associa-
- tion of Secondary-School Principals 27: 13-26; January 1943.

 44. JACOBSON, PAUL B., editor. "Youth at Work." Bulletin of the National Association of Secondary-School Principals 25: 1-145; May 1941.
- 45. JACOBSON, PAUL B., editor. "Youth and Work Opportunities." Bulletin of the National Association of Secondary-School Principals 24: 1-158; April 1940.
- JACOBSON, PAUL B. "Adolescents Need Experience in the Work of the World." General Education in the American High School. North Central Association of Colleges and Secondary Schools. Chicago: Scott, Foresman and Co., 1942. Chapter 11.

- 47. JAMES, WILLIAM. "The Moral Equivalent of War." Memories and Studies. New York: Longmans, Green and Co., 1912. p. 290-91.
- 48. JOHNSON, B. LAMAR. "General Education-What Is It and Why?" General Edu-
- cation in the American High School. North Central Association of College and Secondary Schools. Chicago: Scott, Foresman and Co., 1942.

 49. JOHNSON, B. LAMAR. "The Junior College." General Education in the American College. Thirty-Eighth Yearbook, Part II. National Society for the Study of Education. Bloomieran III. Public School Publishing. Education. Bloomington, Ill.: Public School Publishing Co., 1939.
- 50. JOHNSON, PALMER O., and HARVEY, OSWALD L. The National Youth Administration. Advisory Committee on Education, Staff Study No. 13. Washington, D. C.: Gov-
- ernment Printing Office, 1938. 120 p.
 51. LEARNED, WILLIAM L., and WOOD, BENJAMIN D. The Student and His Knowledge. New York: Carnegie Foundation for the Advancement of Teaching, 1938. 406 p.
- 52. LEONARD, J. PAUL. "The Nature of Work Experience." Bulletin of the National Association of Secondary-School Principals 27: 7-12; January 1943.
 53. LORWIN, LEWIS L. Youth Work Programs. American Youth Commission, Wash-
- ington, D. C.: American Council on Education, 1941. 195 p.
 54. MacFarlane, Ruth. "What Is Educative Work-Experience?" California Journal
- of Secondary Education 17: 334-39; October 1942.
- 55. MACGRATH, EARL J., and OTHERS. "General Education in Professional Education." General Education in the American College. Thirty-Eighth Yearbook, Part II. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1939.
- 56. MacGrath, Earl J. "The Cooperative Study in General Education." Junior College Journal 9: 500-506; May 1939.
- MACKENZIE, GORDON N. "Emerging Curriculums Show New Conceptions of Sec-ondary Education." General Education in the American High School. North Central Association of Colleges and Secondary Schools. Chicago: Scott, Foresman and Co., 1942.
- 58. MacLean, Malcolm S.; Little, Winston L.; and Works, George A. "The Gen-MACLEAN, MALCOLM S.; LITTLE, WISSION L.; and WORKS, GEORGE A. The General Colleges." General Education in the American College. Thirty-Eighth Yearbook, Part II. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1939. p. 135-70.
 MAXWELL, GEORGE L., and OTHERS. "The Relationship of the Federal Government to the Education of Youth of Secondary School Age." Bulletin of the National Association of Secondary-School Principals 25: 3-34; April 1941.
- MAY, MARK A., and OTHERS. "General Education in the United States: A Panel Discussion." Educational Records 20: 437-53; July 1939.
- 61. McClusky, Howard Y. "A Philosophy of Work Experience." Progressive Education 19: 72-75; February 1942.
- 62. Meiklejohn, Alexander. The Experimental College. New York: Harper and Brothers, 1932. 421 p.
- 63. Munzer, Martha. "A Second Year of Work Camp Education: Experiences at Hudson Guild Farm in 1939." Progressive Education 17: 255-59; April 1940.
- Munzer, Martha, and Robinson, Ormsbee W. "High School Students' Experience in the Hudson Guild Summer Work Camp." Progressive Education 15: 635-41; December 1938.
- 65. NATIONAL EDUCATION ASSOCIATION and AMERICAN ASSOCIATION OF SCHOOL AD-MINISTRATORS, EDUCATIONAL POLICIES COMMISSION. The Purposes of Education in American Democracy. Washington, D. C.: the Commission, 1938. 157 p.
- 66. NATIONAL EDUCATION ASSOCIATION and AMERICAN ASSOCIATION OF SCHOOL AD-MINISTRATORS, EDUCATIONAL POLICIES COMMISSION. The Civilian Conservation Corps, the National Youth Administration, and the Public Schools. Washington, D. C.: the Commission, 1941 79 p.
- NORBERG, KENNETH D. American Democracy and Secondary Education. Contribu-tions to Education, No. 886. New York: Teachers College, Columbia University, 1943. 130 p.
- 68. ODELL, WILLIAM R. "Administering the Work-Experience Program." California Journal of Secondary Education 17: 340-43; October 1942.
- 69. ORTON, DWAYNE. "Developing a Philosophy of Work Experience." California Journal of Secondary Education 17: 344-45; October 1942.

tan

chi

in

de

eff

of

ne

ta

SC

of SI

m

- 70. PACE, C. ROBERT. They Went to College. Minneapolis: University of Minnesota Press, 1941, 148 p.
- 71. Progressive Education Association, Commission on Secondary School Cur-RICULUM. Science in General Education, 1938, 591 p.; Language in General Education, 1940, 226 p.; Mathematics in General Education, 1940, 423 p.; The Social Studies in General Education, 1940, 401 p. New York: D. Appleton-Cen-
- 72. ROBINSON, ORMSBEE W. "Work as Education: An Experiment." Curriculum Journal 10: 73-75; February 1939.
- 73. RUSSELL, JOHN D. "General Education in the Liberal Arts Colleges." General Education in the American College. Thirty-Eighth Yearbook, Part II. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1939. p. 171-92.
- 74. SEYFERT, WARREN C., and REHMUS, PAUL A., editors. Work Experience in Education. Harvard Workshop Series, No. 2. Cambridge, Mass.: Graduate School of
- Education, Harvard University, 1941.
 HARPE, LLOYD B., and OSBORNE, ERNEST G. "Schools and Camping." Progressive 75. SHARPE, LLOYD B., and OSBORNE, ER Education 17: 236-41; April 1940.
- 76. SPAFFORD, IVOL O., and OTHERS. Building a Curriculum for General Education. Minneapolis: University of Minnesota Press, 1943. 353 p
- 77. STOLZ, HERBERT R. "Educational Implications of Work-Experience." California
- Journal of Secondary Education 17: 331-33; October 1942.
 78. Thayer, Vivian T.; Zachry, Caroline B.; and Kotinsky, Ruth. Reorganizing Secondary Education. New York: D. Appleton-Century Co., 1939. 483 p.
- 79. THAYER, VIVIAN T. "Current Trends in the Development of General Education." Educational Record 20: 373-94; July 1939.
- 80. TYLER, HARRY E., and McLaughlin, James O. "The Present Program of General
- Yler, Harry E., and McLauchlin, James O. The Fresent Program of General Education." California Journal of Secondary Education 16: 145-48; March 1941.
 Warren, Curtis E. "A Work-Experience Program for Youth." Bulletin of the National Association of Secondary-School Principals 27: 69-77; November 1943.
 Weakley, Guy A. "Coordinating the Community Work Program." California Journal of Secondary Education 17: 352-53; October 1942.
 Williams, Cornella T. These We Teach. Minneapolis: University of Minnesota Program 1989.
- Press, 1943. 188 p.

 84. Wriston, Henry M. The Nature of a Liberal College. Appleton, Wis.: Lawrence
- College Press, 1937. 177 p.

CHAPTER II

Home and Family Life Education

HESTER CHADDERDON

A GLANCE AT CONTEMPORARY AMERICAN SOCIETY makes clear the important relation between family living and citizenship. The family gives the child his first experiences in group living and, hence, is a potential factor in developing attitudes and abilities, either desirable or undesirable from a democratic point of view. Teachers and social workers are aware of these effects in terms of juvenile delinquency, of attitudes toward minority groups, of tendencies to be considerate of others' rights and needs, and of a willingness to assume responsibility, to name but a few. An educational program, taking cognizance of interests and needs at various age levels from preschool thru adulthood, may well accept as one of its major purposes that of aiding family members to assume their roles effectively both in the small family group and in the larger community group.

The effect of family life on the efficiency of the worker has been demonstrated: family discord, poor food, and inefficient money management promote irritation and inefficiency on the job. Also as the number of married women "gainfully" employed continues to increase, need for a greater sharing of home responsibilities by all family members becomes apparent. The changing of attitudes regarding masculine responsibilities and the teaching of technics of housekeeping take on greater importance for the entire family

and pose problems for educators.

Many agencies are at present concerned with education for home and family life. The numbers and types of agencies have increased rapidly in recent years as recognition of the need for education in this area has become more apparent. Doubtless, research has aided in the increasing awareness of need and in the effectiveness of programs, but more and better studies are imperative.

This review of research in the past three years has attempted to report and evaluate the most important published studies. Little attention has been given to consumer education as it relates to home and family life, however, since a recent publication (20) summarized investigations in this area.

No studies were found which reported adaptations of programs due to wartime conditions, but it is known that changes have been made in particular schools or colleges. At the secondary level emphasis has been increased in nutrition, food preservation, child development, and care and repair of clothing and equipment. Colleges also have given greater consideration to these aspects and some have accelerated their programs.

Curriculum

Educators are becoming increasingly aware of the importance of home and family life education at the elementary level. Two studies in different

Oct

cre

po

ch

sections, South and East, in the upper elementary grades are suggestive of some curriculum needs. Luecke (18) investigated certain attitudes and home activities of 370 children in the fourth, fifth, and sixth grades in Denton, Texas. Nine- and ten-year-old boys and girls participated in simple care of their personal belongings, rooms, and clothes; in simple, routine housekeeping and meal activities; and in buying groceries. At eleven, girls began to assume responsibility for laundering their clothes, for cleaning which required more skill and persistence, and for meal preparation. The complexity of the girls' activities continued to increase thru the twelfth year. There was less increase of responsibilities in number and difficulty during the four years for the boys. Interest in care of children was found to be highest in Grade VI in a study of fifth-, sixth-, seventh-, and eighth-grade pupils in a Massachusetts school (22).

Wartime problems have focused attention on nutrition. Two types of studies have been made at the high-school level: surveys of food habits and the recognition by pupils of problems in the area of nutrition. It would appear that the dietaries of high-school pupils vary considerably in different states. Using the standard established by the Food and Nutrition Committee of the National Research Council, the rank of intake in relation to standard varied from third to ninth for green and yellow vegetables by pupils in Louisiana (7) and those in Kansas and Minnesota (16). Milk ranked second, eighth, and fourth respectively, but meat was first in each of the three states.

The Mooney Problem Check List, which contains two problems relating in part to food intake, was used in studying the pupils in one junior high school. Seventeen percent checked the problem "disliking certain foods" and 13 percent "being overweight" (1). Doane's (8) investigation of topics which adolescents would like to study included one on "How to select foods that will do you the most good"; 37.8 percent of the 2069 high-school pupils indicated such a desire.

Three investigations made recently are concerned to some extent with family relations at the secondary level. Doane (8) asked youths from thirteen to eighteen years of age in city and rural high schools of four states to choose five of nineteen courses they would most like to take, and the specific topics about which they would like to have information. A course on relations with parents ranked next to the last for the boys and fifth from the last for girls. When 7021 high-school pupils in nine states checked a schedule regarding family quarrels, Punke (25) found that girls often quarrelled with their mothers regarding clothes. Twelve percent of 246 pupils in a junior high school checked the problem "Talking back to parents" (1). In Doane's study, differences of approximately 10 percent were found between the number of boys and girls interested in studying the six topics concerned with parent-adolescent relations.

A course on how to make friends rated second among the pupils for the group as a whole, but sixth for the boys, whereas one on "dating" ranked

f

eighth and tenth respectively in Doane's study. "Choosing one's husband or wife" achieved a rank of eleventh and became more popular with an increase in age, particularly with the boys. Sex education was believed of greater importance than the former topic and the ranks varied only two points between the boys and girls. Management of money was a course chosen by one-fourth of the group; and the topic of most interest, "How to get the most for your money." Punke (25) found that approximately two-fifths of the quarrels reported between adolescents and parents related to economic matters. The problem of having no regular allowance was checked by 13 percent, and that of learning how to spend money wisely by 16 percent of a junior high-school group (1).

It is significant that in the past three years more curriculum studies have been published that relate to the college than to any other level. In a sampling of 308 institutions the number offering terminal curriculums increased from 106 to 136 between 1938-39 and 1939-40 (11). Courses most frequently offered were in foods and nutrition, clothing and textiles, and home management (11, 27). The catalogs of thirty of the fifty-four institutions studied listed one or more courses in consumer education; twenty-two courses were offered by home economics departments, eleven by economics

departments, and six by commerce departments (12).

The General College, University of Minnesota, collected data to secure a picture of its students, and some of the information relates to family life education (29). When one hundred carefully selected students were asked to indicate which five of twenty-six possible sources of personal satisfactions they considered most important, both men and women most frequently checked "A happy married life," 70 and 66 percent respectively. "Making a good home" rated third for the men and fourth for the women. A large majority was looking forward to married life, desired to limit their families to two or three children, wanted to provide good homes and sex instruction for their children, and regretted not having received more sex education and preparation for marriage in their own homes. Williams (29) concluded that the interests of these junior-college students were limited to certain aspects of preparation for marriage and that instructors would need to make them aware of other equally important phases.

The development of education for home living at the General College, University of Minnesota, (26) between 1935 and 1941 was based on the assumption that certain aspects of home life education are more effective when the student is near adulthood and that this education is needed by both men and women. Considerable experimentation with the types and organization of courses took place during the period. By 1938-39 a home life orientation area had been organized around a core of three courses: The Home in Present Society; Maintenance Aspects of Family Life; and Human Relations and Family Life. Several courses in euthenics also related to education for family life: Food Selection and Purchasing; Clothing:

Selection, Purchase, and Care; Selecting and Maintaining a Home; Housing and Income Management; Individual and Household Buying.

Previous investigations have shown that many students leaving college before completing a four-year curriculum have not discovered types of vocational opportunities for which they should seek preparation before dropping out of school. One home economics department, that at the University of Minnesota, surveyed (3) the opportunities likely to be available in the postwar period in the Twin Cities for girls who had had limited home economics training. The persons in charge of hiring employees in ninety-eight firms were interviewed and ninety different jobs were identified. The greatest number were in cafeterias, department stores, hotels, restaurants, and retail food stores.

A study (4) of the home economics departments in nineteen liberal arts colleges in the Middlewest indicated that one of their major objectives related to preparation for marriage and maintaining a home. However, seven required no courses in child development, in family relations, or in home management for their majors. Foods and nutrition, textiles and clothing, and art made up the majority of required courses in home economics.

In an attempt to discover what college students and alumni considered important to study with regard to marriage and the family, Drummond (9) used a questionnaire asking for anonymous free-response suggestions and checks on a list of questions proposed for discussion. These were administered to 320 freshmen, 164 seniors, and 148 alumni of the liberal arts colleges in two large universities. When the 2752 suggestions were classified, specific information dealing with premarital and marital sex adjustments ranked first; premarriage problems, including dating and choice of a mate, ranked second; accord in marriage and family relations, third; family economics, fourth; child guidance and the role of the child in the family, fifth; adjustments between generations, sixth; family discord, seventh; religion in family, eighth; and the family as a social institution, ninth. There were greater differences between the interests of seniors and alumni than between the interests of seniors and freshmen, but the sex of the participant made little difference.

To secure a basis for the improvement of an adult education program, a rural community in Iowa was studied to discover the extent to which democracy prevailed in the homes. Interviews with a random sampling of fifty town and seventy farm families, a questionnaire dealing with parent-adolescent relations, and the Mooney Problem Check List, High School Forms, were used by Lyle (19) to collect evidence on six criteria. She found that the physical environment of the homes was more conducive to physical health than to intellectual growth. Altho the family members commonly shared many of the responsibilities of home life and of economic security, there was little participation of members in joint planning and choice of family goals. Evidence indicating the development of special

talents were few, and concern for the welfare of the world-at-large was limited. Apathy characterized the attitude toward community improvement.

In one state, Louisiana, the interest in nutrition resulted in a study of the foods served for one week and the foods produced in the homes of 780 members of home demonstration clubs (6). Using the Food and Nutrition Committee standard, 41 percent of the weekly diets scored good, 51 percent fair, and 7 percent poor. The greatest inadequacies were in whole

grain cereals, fruits, and raw vegetables.

The methods of changing food habits have been given little experimental attention in comparison with the number of surveys of food habits. Under the stimulation of the Committee on Food Habits of the National Research Council, Lewin (17) has made an exploratory study of the relative effectiveness of the lecture and group discussion methods. Women from three income levels were divided into control and experimental groups. In the three control classes an expert nutrition lecturer stressed the health and economic aspects of using such meats as kidneys, brains, and hearts; methods of preparation were discussed, and recipes given. In the three group discussion classes the same information was imparted but the appeal was for the participants to take some responsibility for helping change food habits, and a vote was taken to register their willingness to try one of the meats the following week. Previous to the class meeting the women in the control and experimental groups served these foods with almost equal infrequency. The following week 52 percent of the forty-four group discussion individuals and 10 percent of the forty-one lecture individuals served at least one of the meats. No evidence was given in the report of any attempt to determine how permanent the changes were.

Effectiveness of Programs

The development of technics for evaluating the effectiveness of certain aspects of home and family life education programs has been the subject of two investigations. The wise use of personal and family resources is an important objective in this field, yet little has been done to determine means of securing reliable evidence of growth. Price (24) worked out a paperand-pencil test, with one form for high-school and one for college girls, using seven situations involving common types of personal problems and requiring a choice of solutions and reasons to support the solution selected. The situations, solutions, and reasons were secured from an analysis of real decisions on problems made by more than two hundred high-school and college students. The score on the test was determined by the number and nature of the facts considered, the extent of foreseeing consequences, and the degree of holding democratic attitudes. To check the validity of the test, Price compared the test scores with those secured when 557 high-school and 529 college students analyzed a problem of their own. Coefficient of reliability of .83 and .86, respectively, were secured for the tests by using the split-half method and applying the Spearman-Brown formula (24).

As part of an experiment in developing instructional materials to improve dietary conditions in a community, Boyd (2) constructed instruments to measure the favorableness of elementary- and high-school pupils' attitudes toward desirable practices in the production, storage, and consumption of food. An attitude questionnaire was developed by submitting 203 items to nine judges for sorting into neutral, favorable, and unfavorable piles. Any item placed in the neutral pile by one judge was discarded as were items not unanimously agreed upon as favorable or unfavorable. The splithalf method gave estimated coefficients of reliability of .81 to .90 for the three sections of the test. A free association test was also constructed using fifteen stimulus words which gave a coefficient of correlation of .31 with the attitude test.

An examination of the effectiveness of programs either at the younger or older adolescent ages has been made in eight studies. Accepting the criterion that carry-over into homes is fundamental in family living, a committee of the home economics section of the American Vocational Association (28) collected more than 3000 illustrations of successful carry-over. Recognizing the limitations of this type of study, attention is nevertheless called to the publication because it suggests means for supplementing the findings of paper-and-pencil tests with informally secured evidence.

Designed to discover the degree to which the 4-H Club program in clothing was functioning in Massachusetts, a study (14) was conducted in three counties, using 317 clothing club members and 230 girls of comparable ages who had never belonged to that type of 4-H Club. Tests on the understanding of patterns and the selection of materials, colors, and designs for dresses showed differences between the two groups large enough to be significant; the critical ratios being 7.9 and 5.9 respectively. Also the clothing group made significantly greater gains in self-confidence in making garments and in appreciation of the clothing they made.

Experimentation with entire courses or units on social relations for adolescents has been undertaken in attempts to discover the effectiveness of the teaching as indicated by paper-and-pencil tests involving such problems as brother-and-sister relationships, parent-adolescent relationships, expenditure of money, choice of friends, and family recreation. One study included a six-week unit for boys (15); the other was a semester course for senior boys and girls (5). The former found little change in attitude among ninety boys in one school. Whether this was due to the length or content of the unit taught, to the personality of the teacher, or to the inability of the test to indicate change is not clear from the report. Since the test scores indicated that a majority of the boys held attitudes before instruction which agreed with those of a selected group of adults, it seems likely that the test was inadequate to measure growth. Brown (5) used a control group of forty-three pupils with ages, physical maturity, economic level, reading ability, and nationality background similar to the forty-three in the experimental group. The twelve-week course was based on the problems of adolescents as revealed in literature, and in surveys of former students and the group under study. The scores on a test designed to determine ability to apply principles to personal and social relations in new situations indicated a statistically significant difference between the means on the pretest and final test after correction was made for the control group.

Experimentation relating to the use of one type of community resource as a supplement to classroom instruction has also been reported. Meshke (21) used ninth- and tenth-grade classes in ten communities accessible to Minneapolis to study the relative effectiveness of consumer experiences in stores in two units: food selection and purchase, and selection and care of electrical equipment. She used three groups of pupils for each unit: (a) those in classes providing direct contact with stores, (b) those in classes limiting experiences to the classroom, and (c) those in which no special adaptations were made. The same forms of pencil-and-paper tests were administered as pre- and retests. Differences between the mean gains were significant at the 1 percent level in the ninth grade and favored the classes studying food with store contacts. In the tenth grade, the store group studying electrical equipment improved sufficiently more than the classroom group to indicate that the difference probably was not due to sampling. However, there were wide differences among schools using the different methods, and the investigator in her final analysis eliminated the school deviating most on the assumption that such elimination would improve the homogeneity of her groups. One class in the tenth-grade control group gained more than all other classes except one. This control class was also eliminated, but attention was drawn to the fact that the special booklet prepared for use only in the experimental classes has been used in the one control class. It is possible that the booklet was as great a factor in the growth of the experimental classes as the store contacts. One wishes that the author had investigated other possible reasons for the wide variations among the groups.

Foster and Wilson (13) made extensive case studies of one hundred college women graduates living in Detroit to discover how well education had prepared them to meet their needs. The group was made up largely of married women (76 percent), a majority (80 percent) of whom came to the Merrill-Palmer School for some type of advisory service. As a result of analyzing the problems encountered by these women, the authors concluded that parents and schools had almost completely ignored their need to be prepared to live with their families, to establish heterosexual contacts, to earn a living, to make adjustments in marriage, and to bring up children.

One of the studies made at the University of Minnesota as a part of the curriculum investigations for the General College (23) serves also to evaluate the effectiveness of the University's program. Former students of the four largest undergraduate divisions were selected for study, and approximately 1500 names chosen at random from the entering classes of 1924, 1925, 1928, and 1929 were sent questionnaires. A response was re-

Oct

for

has

cou

ceived from 951 of the 1381 whose addresses were correct. This sample was biased by representing somewhat better scholastic records and greater academic persistence, but from several other standpoints corresponded closely to the original sample. Two hundred of these former students were interviewed to secure supplementary data, and one section of the mailed questionnaire contained eighteen items relating to home and family life. Pace believed there was evidence that "a majority of the men were not interested in family problems or active in family affairs" (23:90), also there were frequent indications among the alumni of inefficient methods of handling money and dissatisfaction with the size of their incomes. Fewer, but still an important minority, reported problems of relationships. The interest in child development was high, and the relationship of jobs to family life posed problems for many. In spite of these evidences of need only about one-half of the women and almost none of the men admitted a belief that they would have benefited from college training relating to such family problems as child development, home management, and relationships.

Eckert's appraisal (10) of the program at the General College, University of Minnesota, was particularly significant since home and family life education had received special attention. A paper-and-pencil test involving important facts and understandings was constructed in two forms. When administered to all students in the fall and spring of 1939-40 it was found that both the group which had elected Home Life Orientation, and the one which had not, gained significantly on the test. Using covariance analyses it was found that at the 5 percent level there were significant gains for students who had had at least two quarters of Home Life Orientation over other students. Furthermore, men made as great progress as women, and those who had taken the course the year before did as well on the test as those who had just completed the course. However, on the family adjustment section of the Minnesota Personality Scale and of the Bill Adjustment Inventory there was almost no change in scores during one year.

Work Experience

Considerable emphasis has been placed on work experience, particularly at the secondary level, but no research has appeared in the literature in recent years regarding this aspect of the home and family life program. Recognition of the importance of experience in the home came with the provision for federal aid in 1917. Home projects have since been required or strongly recommended in most state programs. In colleges and universities students have been encouraged to develop homemaking skills thru home projects, and sometimes such experiences are required as prerequisites for advanced courses in food preparation and clothing construction. The need for actual experience in the management of home is recognized in teacher education programs, but in many institutions little provision has been made for evaluation of the kind and amount secured be-

fore a teacher is recommended for a position. Internship for dietitians has been required for a number of years, and follows the four-y ar college course.

Bibliography

- 1. ARNOLD, DWIGHT L., and MOONEY, Ross L. "A Students' Problem Check List for Junior High School." Educational Research Bulletin 22: 42-48; February 17,
- 2. BOYD, GEORGE R. The Construction of an Instrument for Measuring Attitudes toward Desirable Food Practices. Bulletin of the Bureau of School Service. Vol. 16, No. 1. Lexington: University of Kentucky, 1943. 89 p.
- BROWN, CLARA M. Employment Opportunities for Women with Limited Home Economics Training. Minneapolis: Burgess Publishing Co., 1944. 44 p.
 BROWN, CLARA M. Home Economics in Liberal Arts Colleges. Minneapolis: Burgess
- Publishing Co., 1943, 102 p.
 5. Brown, Sara A. Effectiveness of a Course in Personal and Social Living in Developing the Ability of High School Seniors to Apply Principles in Personal-Social
- Relations. Ames: Iowa State College, 1942. 171 p. (Master's thesis.)

 6. Bryson, Bertha E.; Tucker, Clara; and Davis, Horace J. A Study of the Diets of Home Demonstration Club Members' Families in Twenty-Seven Parishes of Louisiana, Louisiana Bulletin 356. Baton Rouge: Louisiana State University and
- Agricultural Experiment Station, December 1942. 23 p.
 7. Coco, Lucille D., and others. A Study of the Adequacy of Diets Consumed by Grade School and High School Students in Louisiana, Louisiana Bulletin 360.

 Baton Rouge: Louisiana State University, January 1943. 10 p.
 8. Doane, Donald C. The Needs of Youth: An Evaluation for Curriculum Purposes.

 Contributions to Education No. 848. New York: Teachers College, Columbia
- University, 1942. 150 p.

 9. Drummond, Laura W. Youth and Instruction in Marriage and Family Living.
 Contributions to Education No. 856. New York: Teachers College, Columbia
 University, 1942. 186 p.
- 10. ECKERT, RUTH E. Outcomes of General Education: An Appraisal of the General College Program. Minneapolis: University of Minnesota Press, 1943, 210 p.
- Eells, Walter C. Present Status of Junior College Terminal Education. Terminal Education Monograph No. 2. Prepared for the Commission on Junior College Terminal Education. Washington, D. C.: American Association of Junior Colleges, 1941. 340 p.
- 12. FASNACHT, HAROLD D. "Consumer Education in Junior College." Junior College Journal 14: 118-21; November 1943.
- FOSTER, ROBERT G., and WILSON, PAULINE P. Women after College. New York: Columbia University Press, 1942. 305 p.
- 14. FRUTCHEY, FRED P., and FORBES, MARION E. Evaluation in the 4-H Clothing Project, Massachusetts 1940-1941. Extension Service Circular 384. Washington, D. C.: U. S. Department of Agriculture, Cooperative Extension Work in Agriculture and Home Economics, July 1942. 33 p.

 15. Goldsmith, Frances S., and McClanathan, Helen. "Adolescent Attitudes." Journal of Home Economics 34: 92-96; February 1942.

 16. Leichsenring, Jane M., and others. "Diets of 524 High School Girls." Journal of Home Economics 35: 583-86; November 1943.

- 17. LEWIN, KURT. "Forces behind Food Habits and Methods of Change." The Problem of Changing Food Habits. Bulletin of the National Research Council, No. 103, October 1943. p. 35-65.
- 18. Luecke, Editha L. Factors Relating to Children's Participation in Certain Types
- of Home Activity. Contributions to Education No. 839. New York: Teachers College, Columbia University, 1941. 103 p.

 19. Lyle, Mary S. "A Program of Adult Education to Promote Democracy in the Home and Family Life of an Iowa Community." Abstracts of Doctoral Dissertations No. 41. Columbus: Ohio State University Press, 1943. p. 119-25.
- 20. MENDENHALL, JAMES E., and HARAP, HENRY, editors. Consumer Education: Background, Present Status, and Future Possibilities. New York: D. Appleton-Century Co., 1943. 399 p.

ch

co

de

di

- 21. Meshke, Edna D. "The Effects of Utilizing Selected Community Resources in Ninth-Grade and Tenth-Grade Homemaking Classes." Journal of Experimental

- Ninth-Grade and Tenth-Grade Homemaking Classes." Journal of Experimental Education 12: 1-9; September 1943.

 22. Munyan, Viola. "Homemaking in an Elementary School." Practical Home Economics 20: 252-55; July-August 1942.

 23. Pace, C. Robert. They Went to College: A Study of 951 Former University Students. Minneapolis: University of Minnesota Press, 1941. 148 p.

 24. Price, Hazel H. "Securing Valid and Reliable Evidence of the Ability of the Adolescent Girl to Make Intelligent Decisions Concerning the Use of Personal Resources." Abstracts of Doctoral Dissertations No. 29. Columbus: Ohio State University Press 1939 p. 95.102
- State University Press, 1939. p. 95-102.

 25. Punke, Harold H. "High School Youth and Family Quarrels." School and Society 58: 507-11; December 25, 1943.
- 26. SPAFFORD, IVOL, and OTHERS. Building a Curriculum for General Education: A Description of the General College Program. Minneapolis: University of Min-
- nesota Press, 1943. 353 p.
 27. Stark, Saidee E. "Family Life Education in Junior Colleges." California Journal
- of Secondary Education 17: 97-101; February 1942.

 28. WALSH, LETITIA. The Carry-Over into Homes of the Teaching of Family Living to In-School and Out-of-School Youth. Washington, D. C.: American Vocational
- Association, January 1943, 17 p.

 29. WILLIAMS, CORNELIA T. These We Teach: A Study of General College Students. Minneapolis: University of Minnesota Press, 1943. 188 p.

CHAPTER III

Industrial Education

JOHN A. WHITESEL

This review of researches completed during the past three years includes studies both in industrial arts and industrial vocational education. The number of researches in industrial education for this triennium, as compared with previous periods, was considerably smaller. This situation doubtless may be ascribed to the fact that many leaders in the field of industrial education have been on special service during the war.

Solving Problems of Everyday Living

The researches showed that considerable emphasis has been given to the problems of everyday living. This manifested itself not only in teaching methods and the nature of the content, but also in the concern for the daily welfare of both the pupil and the teacher. The development of safety programs for school shops to reduce the hazards of industrial work was studied by Hughes (31). Forsea (21) found that in recent years greater emphasis has been placed on the scientific consideration of physical plant and equipment. He stated that it was more common to organize new general shops according to scientific planning principles than to reorganize old unit shops. Bollinger (11) and members of his planning classes at the Ohio State University thru experimental study developed a fairly comprehensive set of principles based on educational criteria for selecting equipment. The rules, regulations, and laws concerning workmen's compensation were investigated by Goodwin (26) thru an inquiry addressed to superintendents of public instruction and state directors of education. Courses in safe driving practice have been included in many high-school and college programs. In a national study made just before this country entered the war, Christman (17) found that the number of such courses was increasing rapidly. He stated that these courses were usually taught by industrial arts and vocational teachers. Considerable emphasis also has been given to improving housing and living conditions. National concern for cheaper and better housing was echoed by Bowers (14) who wrote, "The housing industry has failed to produce any appreciable amount of housing which the 82 percent of our population with incomes below \$2000 can buy." He found that an increased number of courses dealing with better living were being introduced in high schools, colleges, and universities.

Phillips (46) studied the population and occupational shifts among Negroes in the South Atlantic region and developed a program of industrial education to meet needs arising from social and economic changes. The life needs of youth in the basic areas of living were used by Brown (15) as a basis for developing a program of visual arts on the secondary level. Perry (45) was concerned with the everyday problems and devel-

opment of the child thru a general arts workshop and found a need for making art programs more practical. Neff (39) studied the development of the federally reimbursed program of vocational education in North Dakota and interpreted the program in the light of the state's natural resources and the occupational needs of its populace.

Broadening the Development of the Individual

In recent years more emphasis has been placed on educating the individual for daily living and on improving his vocational adaptability. According to Kefauver (38), "It is not enough to train a person to operate a machine efficiently." More emphasis should be placed on the worker-citizen. Concern should be felt for all aspects of the performance of the individual in the vocational situation. The trend is away from highly specialized operative work and toward a broad technical background and ability to perform well a wider range of skills. The skilled mechanic is expected to have the necessary technical understanding and skill to make almost any article produced in a given trade. With changing occupational and economic conditions, such skill is possible only if programs of continuous trade training are provided. Lee (33) stated that education for work in its guidance function should be concerned with nothing less than the complete occupational picture presented by the community.

A number of studies dealt with the broadening of content in shop courses. Examples are those by Foss (22) on functional house planning experiences for the senior high school, Gross (24) on experimentation with ceramic glazes, and Seeman (52) on photographic content for industrial arts on the secondary-school level. In his survey of organization, content, and methods in general industrial arts in selected American secondary schools, Borri (12) found a trend toward broader programs. Micheels (35) and others stressed the need for more flexible programs in developing the course of study of industrial arts in Utah. Baker (8) conducted a survey of practical and applied arts offerings in senior high schools to determine the content which might be utilized in preemployment trade education.

Developing and Using Evaluation Instruments

Increasing emphasis is being placed on the use of evaluation instruments in industrial education. Beach (9) studied the problem of selecting trainees in vocational industrial schools, and he recommended that administrators use all the knowledge now available on the relation of aptitudes, abilities, traits, and characteristics to vocational success. Ross (48) expressed the need for more scientific and improved methods in the selection of enrollees for defense classes. He conducted an experimental program of selection where various interviews and tests were used. Achard (1) made a critical study of certain psychological tests and measurements to determine whether they differentiated between groups of more and of less capable supervisory employees of various types.

In the past, administrators often have used unscientific methods in planning new vocational courses. Campion (16) developed a set of criteria in the form of a check sheet to be used for this purpose. A curriculum revision based on the trade analysis approach was made by Paine (41) in a vocational high school. More valid measures of mechanical ability at the adult level were developed by Coover (18). The chief contribution of his study was the development of more precise evaluation instruments. Typical of a number of vocational tests recently developed are those prepared by the members of the Division of Education and Applied Psychology at Purdue University (56). Known as the Purdue Vocational Tests, they include an adaptability test; an industrial training classification test: a technical information test for machinists and machine operators; a test for electricians; a blueprint reading test; an interviewer's rating scale; and tests on reading a working drawing, a micrometer, and a scale. study by Tussing (58) indicated that "self-confidence" and "sociability" could be predicted with a fair amount of success by using the Strong Vocational Interest Blank. He also found that individuals could be classified fairly well as "theoretical" and "economic" by using the Strong keys for the measurement of these traits. A study of visual problems of industry, particularly the tendency of the eyes to deviate from normal convergence under certain test conditions, was conducted by Wirt (65).

In a study which compared groups of boys electing industrial arts in high school with those who chose other subjects. Willmott (63) found that the boys in the former group differed slightly from those not electing it. Allison (2) devised inventories for the teaching of machine drafting. In this study he found that instruction had tended to emphasize practice at the drawing board which had little connection with current practices in industry. Ohlson's study (40) revealed that electrical students in cooperative vocational high schools attained greater employment success and were vocationally more efficient than the noncooperative group. Scott (51) found that the grades received in vocational teacher education courses had some

predictive value for later success as a teacher.

Providing Work Experience and Insuring Occupational Adjustment

The growing emphasis on better occupational adjustment and a realization of the importance of work experience were reflected in the studies reviewed. Schools and Manpower (4) stated that it is a primary function of the state and nation to establish agencies for analyzing the abilities of youth and also for encouraging youth to achieve their potentialities.

Many of the studies reported in the preceding section on evaluation emphasized the importance of developing better facilities and instruments for identifying capacities in individuals (1, 9, 18, 48, 56, 58, 65). The importance of several months of experience in some form of gainful employment was brought out in a number of studies, for example those by

Smith (54) and Seyfert and Rehmus (53). Good (25) pointed out that the introduction of work education and activity methods is a comparatively recent phenomenon. The nation's growing consciousness of the importance of efficient use of manpower was reflected in such researches as that conducted by Hill (28). It was his aim to examine objectively in terms of certain fundamental principles evolved in the field of vocational education, and to evaluate an existing county program of occupational adjustment. Occupational plans of high-school students in the small high schools of a county system were studied by McCormick (34). A need for more vocational guidance in high schools was found by Wininger (64).

Improving the Preparation and Raising the Qualifications of Teachers

Continued interest was shown in the improvement of teacher preparation and qualifications. Wilber (62), in a study which attempted to develop technics for the evaluation of an industrial arts teacher education program. found that much work needs to be done in clarifying the objectives of industrial arts teacher education, Hornbake (29) conducted an experimental program in the field of elementary-school industrial arts which gave evidence of achievement of three of the four major goals sought, namely (a) to provide children with opportunities to express themselves in a variety of tangible or material media; (b) to provide an atmosphere which makes possible the development of wholesome personal-social relationships; and (c) to provide many opportunities for children to think in planning and executing their tasks and in appraising their efforts. Struck (6) surveyed current practices in thirty-two institutions which provide an industrial teacher education program at the graduate level. The study by Pawalek (44) on industrial arts teacher preparation revealed an interest in more effective means of selecting and admitting students, as well as on more and better follow-up and supervision of recent graduates. A survey of initial problems of beginning teachers was made by Ringold (47), while Wievel (61) collected data pertaining to qualifications and duties of 754 industrial arts teachers employed in Iowa. Parsons (43) found that about 50 percent of the students who entered teachers colleges in Pennsylvania in 1940 expected to become teachers after graduation. Industrial education programs in Negro colleges were found by Turner (57) to be based more on custom and tradition than on an analysis of actual needs, interests, and opportunities of students. According to Taylor (55) craft work has been taught in most teachers colleges, tho often under other titles.

Decker (19) developed a set of principles for a graduate program of industrial arts majors on the master's level, intended especially to meet the needs of secondary-school teachers. Huntington (30) conducted an evaluative study of present practices in the organization and operation of industrial vocational teacher education.

Providing More Standardized Administration and Supervision

The Research Committee of the American Vocational Association has been concerned for the past several years with a study of needs for further extension of vocational programs (5). The results of this committee's study were summarized in a bulletin which proposed expanded vocational educa-

tion services by means of larger administrative units.

A growing tendency toward standardized and more centralized administrative procedures is also evident in recent researches. Micheel's (36) national survey of state supervision showed a growing desire on the part of industrial arts teachers for more help from their state supervising agencies, and indicated a belief among educators thruout the country that this should be forthcoming. Whitesel (59) made a survey of state associations of industrial arts teachers in the United States. While he found a heterogeneity of policy and practice and a lack of professional maturity, there was a decided trend toward state and national organization. A set of principles was developed by a professional jury of state leaders of industrial arts to be used as criteria in developing good state association programs for industrial arts teachers.

The trend toward the equalization of educational opportunity is shown in Gruber's (27) state plan for subsidizing vocational education in Pennsylvania. He found great variation in the relative ability of local school districts in Pennsylvania to support educational programs and concluded that population was not an adequate measure of financial ability. Fraser's study (23) of the certification of industrial arts teachers in the states of the North Central Association area recommended that the Association assume the leadership in securing a unified plan of certification among the states comprising the Association.

Ashbrook (7) traced the historical development of industrial education, especially industrial arts, in the state of Pennsylvania. In a study which compared students at the University of Missouri who had chosen practical arts with those who had chosen nonpractical arts subjects in high school, Bing (10) found there was little difference with regard to success

in the University.

War Emergency Influences

The influences of the war have been heavily felt in both industrial arts and industrial vocational education. Rukavina's survey in Iowa (49) was typical of conditions in industrial arts. A study reported in School and Society (50) stated that due to the great number of teachers leaving for the armed forces and for industry 2500 industrial arts classes and 1500 vocational shops had closed. Bowers (13) found similar conditions. Certification officials in twenty-five out of thirty-nine states claimed the acute shortage was due to the lure of higher salaries in industry. The second reason given was selective service. Karch's survey (32) in 1942 found that

Oct

12.

13.

15.

19.

20.

the enrolment of graphic arts students had declined since the opening of the second World War. Outstanding use of school shops has been made during the war emergency to prepare workers for jobs in production industries. This is borne out in such studies as the survey conducted by Whitesel (60) of typical high schools and teacher preparation institutions in the United States. The superintendents' tour of the Pacific coast reported by Lee (33) in 1941 stressed the urgent need for the all-out training of production workers in the vocational programs of the public schools as well as in the national defense job training programs. Typical of the many examples of wartime uses of industrial arts laboratories were those described in the symposium presented in the American School and University Yearbook for 1943 (3). Training in one particular industry, namely aircraft production, was studied by Flaherty (20) on the East Coast, and by Miller (37) in California. Pelley's study (42) of the educational opportunities in the Civilian Conservation Corps gave evidence of vocational training aimed to stamp out illiteracy; to raise educational standards; to help make boys employable; to develop appreciation for conserving resources; and to train in health and living habits, character, and citizenship.

Bibliography

- ACHARD, FRANCIS H. The Selection of Supervisory Employees in Business and Industry. New York: New York University, 1942. 337 p. (Doctor's dissertation.)
 ALLISON, FLOYD A. Machine Drafting Inventories for Day Trade and Industrial Evening Trade Extension and Defense Training Classes. Detroit: Wayne University sity, 1944. 52 p. (Master's thesis.)
- 3. AMERICAN INDUSTRIAL ARTS ASSOCIATION. "Wartime Uses of Industrial Arts Laboratories." American School and University Yearbook. New York: American School Publishing Co., 1943. p. 299-330.
- AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS. Schools and Manpower— Today and Tomorrow. Twenty-First Yearbook. Washington, D. C.: the Associa-tion, a department of the National Education Association, 1943. 448 p.
- 5. AMERICAN VOCATIONAL ASSOCIATION, COMMITTEE ON RESEARCH AND PUBLICATIONS. An Enlarged Program of Vocational Education with Special Reference to Larger Administrative Units. Washington, D. C.: the Association, 1943. 51 p.
- 6. AMERICAN VOCATIONAL ASSOCIATION, NATIONAL ASSOCIATION OF INDUSTRIAL TEACHER TRAINERS. A Study of Industrial Teacher Education at the Graduate Level. American Vocational Education Bulletin No. 2. Washington, D. C.: the Association, 1941. 42 p
- 7. ASHBROOK, WILLIAM D. The Development of Industrial Education in the Schools of Pennsylvania. Pittsburgh, Pa.: University of Pittsburgh, 1943. 220 p. (Doctor's
- 8. Baker, Alfred E. A Survey and Analysis of Senior High School Practical and Applied Arts Offerings to Determine the Content Which May Be Utilized in Pre-employment Trade Education. Berkeley: University of California, 1943. 397 p. (Doctor's dissertation.)
- 9. BEACH, KENNETH C. "Selection of Pupils in Vocational-Industrial Schools." Industrial Arts and Vocational Education 32: 360-62; November 1943.
- BING, KENNETH L. Success of Students Presenting Practical Arts Credits for Entrance to the University of Missouri. Columbia, Mo.: University of Missouri, 1941, 222 p. (Doctor's dissertation.)
- 11. BOLLINGER, ELROY W. "Principles of Industrial Arts Equipment Selection." Industrial Arts and Vocational Education 31: 128-30; March 1942.

- 12. Borri, Robert. The Organization, Content and Teachings of General Industrial Arts in Selected American Secondary Schools. State College, Pa.: Pennsylvania State College, 1942. 185 p. (Doctor's dissertation.)
- 13. BOWERS, HAROLD J. "Teacher Personnel Shortages in Industrial Arts." Industrial Arts and Vocational Education 32: 243-44; June 1943.
- 14. Bowers, Victor L. American Housing and Industrial Arts Education. Columbus: Ohio State University, 1942. 314 p. (Doctor's dissertation.)
- 15. Brown, Kenneth W. The Visual Arts in Secondary Education. Columbus: Ohio State University, 1942. 353 p. (Doctor's dissertation.)
- 16. Campion, Howard A. Experimental Determination of Criteria for the Establishment of New Vocational Courses. Los Angeles: University of Southern California, 1941. 218 p. (Doctor's dissertation.)
- 17. CHRISTMAN, WEBSTER M. A Study of Certain Administrative Features of Driver Education and Training Courses in the United States in 1940. State College, Pa.: Pennsylvania State College, 1940. 113 p. (Master's thesis.)
- 18. COOVER, SHRIVER L. The Nature and Measurement of Certain Mechanical Abilities. Pittsburgh, Pa.: University of Pittsburgh, 1942. 71 p. (Doctor's dissertation.)
- 19. DECKER, GEORGE C. An Industrial Arts Master's Degree Program: With Particular Reference to the State of New York. Columbus: Ohio State University, 1943. 258 p. (Doctor's dissertation.)
- 20. FLAHERTY, HUGH. Training War Workers for Aircraft Industry. New York: New York University, 1943. 276 p. (Doctor's dissertation.)
- 21. FORSEA, HAROLD L. A Survey of Certain Phases of Selected General Shop Programs in Secondary Schools West of the Mississippi River. Corvallis, Oreg.: Oregon State College, 1943. 115 p. (Master's thesis.)
- 22. Foss, Maurice F. Functional House Planning Experiences on the Senior High School Level. Oxford, Ohio: Miami University, 1941. 159 p. (Master's thesis.)
- 23. Fraser, Roland R. Certification of Industrial Arts Teachers in the States of the North Central Association Area, Detroit: Wayne University, 1944. 160 p. (Master's thesis.)
- 24. GROSS, ALFRED F. Developing and Using Ceramic Glazes in the Arts Laboratory. Oxford, Ohio: Miami University, 1941. 60 p. (Master's thesis.)
- 25. Good, Harry G. Education through Work. Columbus, Ohio: Epsilon Pi Tau, 1943. 16 p.
- GOODWIN, JOHN B. The Status of Industrial Arts Teachers on Accident Compensation. Corvallis, Oreg.: Oregon State College, 1941. 80 p. (Master's thesis.)
- 27. GRUBER, HERBERT H. A State Plan for Subsidizing Vocational Education in Pennsylvania. State College, Pa.: Pennsylvania State College, 1942. 165 p. (Doctor's dissertation.)
- 28. HILL, FREDERICK W. A Plan for the Administration of Occupational Adjustment for the Youth of Rockland County, New York. New York: Teachers College, Columbia University, 1941. 204 p. (Doctor's dissertation.)
- 29. HORNBAKE, R. LEE. Industrial Arts in the Elementary School: A Study of Contributions with Emphasis upon a Specific Program, Columbus: Ohio State University, 1943. 351 p. (Doctor's dissertation.)
- Huntington, Harold A. Industrial-Vocational Teacher Education. Columbus: Ohio State University, 1940. 326 p. (Doctor's dissertation.)
- 31. HUGHES, WAYNE P. Safety Procedures in the School Shop. New York: New York
- University, 1943. 396 p. (Doctor's dissertation.)
 32. KARCH, R. RANDOLPH. "Graphic Arts Enrollment." Industrial Arts and Vocational
- Education 32: 18, 20-22; January 1943.

 33. Lee, Edwin A. All Out Defense Job Training. 1941 Occupational Education Tour for School Superintendents. Los Angeles: the Author (School of Education, University of California), 1941. 48 p.
- 34. McCormick, James H. A Study of the Occupational Plans of the Students of the
- Small High Schools of Johnson County, Kansas. Pittsburg, Kansas. Kansas State Teachers College, 1943. 32 p. (Master's thesis.)

 35. Micheels, William J., director and editor. "Industrial Arts in Utah": Part I "Handbook," 241 p.; Part II, "Course of Study," 506 p. Salt Lake City: Howard B. Gunderson, state director of industrial arts.

Oct

58.

60.

61.

62.

- 36. MICHEELS, WILLIAM J. "State Supervision of Industrial Arts Education." Industrial Arts and Vocational Education 31: 135-38, 154-57; March and April 1942.
- 37. MILLER, JOSEPH V. A Study of the Training Methods Used by a Major Aircraft Industry in War Time. Corvallis, Oreg.: Oregon State College, 1943. 49 p. (Master's thesis.)
- 38. NATIONAL SOCIETY FOR THE STUDY OF EDUCATION, COMMITTEE ON VOCATIONAL EDUCATION. Vocational Education. Forty-Second Yearbook, Part I. Chicago: University of Chicago, 1943. 494 p.
- Neff, William L. A Study of Federally Reimbursed Vocational Education in the State of North Dakota. Palo Alto, Calif.: Stanford University, 1941. 223 p. (Doctor's dissertation.)
- OHLSON, ELI E. A Comparison of the Success of Co-operative and Non-Co-operative Vocational High School Electrical Students in Employment. Pittsburgh, Pa.: University of Pittsburgh, 1943. 134 p. (Doctor's dissertation.)
- 41. PAINE, HARRY W. Revision of a Curriculum in Vocational High School by Means of the Trade Analysis Approach. Ann Arbor, Mich.: University of Michigan, 1943. 465 p. (Doctor's dissertation.)
- Pelley, Albert L. An Investigation of Educational Opportunities in the Civilian Conservation Corps for the Ninth Corps Area. Laramie, Wyo.: University of Wyoming, 1941. 90 p. (Master's thesis.)
 Parsons, Richard T. The Home and School Backgrounds, Measured Vocational
- Interests and Vocational Choices of 869 Students Who Entered the State Teachers Colleges of Pennsylvania in the Fall of 1940. State College, Pa.: Pennsylvania State College, 1942. 141 p. (Doctor's dissertation.)
- 44. PAWALEK, STANLEY J. An Analysis and Evaluation of Certain Common Functional Training Characteristics of Teacher Preparation in Industrial Arts. State College, Pa.: Pennsylvania State College, 1941. 140 p. (Doctor's dissertation.)
- 45. PERRY, KENNETH F. An Experiment with a Diversified Art Program. Contributions to Education No. 863. New York: Teachers College, Columbia University, 1943.
- 46. PHILLIPS, AUGUSTUS C. Industrial Education for Negroes in the South Atlantic Region: the Development of a Program for Negroes Based on Population and Occupational Changes. Columbus: Ohio State University, 1942. 208 p. (Doctor's dissertation.)
- RINGOLD, HOWARD W. Initial Problems of Beginning Teachers of Industrial Arts. Corvallis, Oreg.: Oregon State College, 1942. 116 p. (Master's thesis.)
- 48. Ross, Lawrence W. "Preselection and Classification of Defense Trainees." Industrial Arts and Vocational Education 31: 273-77; September 1942.
- 49. RUKAVINA, FRANK D. Impact of World War II on Industrial Arts in Iowa. Ames:
- Iowa State College, 1943, 82 p. (Master's thesis.)
 50. School and Society. "Will the New W.M.C. Relieve the Serious Shortage of Vocational Teachers?" School and Society 56: 571-72; December 12, 1942.
- 51. Scott, Charles P. Predicting Vocational Industrial Teaching Success. Pittsburgh, Pa.: University of Pittsburgh, 1942. 145 p. (Doctor's dissertation.)
- 52. SEEMAN, JOHN E. A Unit in Photography for Industrial Arts on the Secondary School Level. Oxford, Ohio: Miami University, 1941. 92 p. (Master's thesis.)
- SEYFERT, WARREN C., and REHMUS, PAUL A., editors. Work Experience in Educa-tion: A Report Prepared at the Harvard Workshop in Education, Summer 1941. Harvard Workshop Series, No. 2. Cambridge: Graduate School of Education, Harvard University, 1941. 65 p.
- 54. SMITH, LEO F. "Work-A Realistic Laboratory." Industrial Arts and Vocational Education 31: 422-24; December 1942.
- TAYLOR, G. MANSON. Current Practices in Course Offerings in Craft Work by Colleges of Education in the United States. Detroit: Wayne University, 1944. 66 p. (Master's thesis.)
- 56. TIFFIN, JOSEPH, and OTHERS. Purdue Vocational Tests. Lafayette, Ind.: Division of
- Education and Applied Psychology, Purdue University, 1942 and 1943. 64 p. 57. Turner, Bridges A. Objectives and Problems of Industrial Education in Negro Colleges. State College, Pa.: Pennsylvania State College, 1941. 138 p. (Doctor's dissertation.)

1

- 58. Tussing, Lyle A. An Investigation of the Possibilities of Measuring Personality
 Traits with the Strong Vocational Interest Blank. Lafayette, Ind.: Purdue Uni-
- versity, 1941. 221 p. (Doctor's dissertation.)

 59. WHITESEL, JOHN A. State Associations of Industrial Arts Teachers. Columbus: Ohio State University, 1941. 250 p. (Doctor's dissertation.)

 60. WHITESEL, JOHN A. "A Study of Emergency Services in the Schools." 1943 Year-book of the American School and University. New York: American School Pub-
- lishing Corp., 1943. p. 299-307.

 61. WIEVEL, BERNARD F. Preparation and Duties of Iowa Industrial Arts Teachers.

 Ames: Iowa State College, 1943. 75 p. (Master's thesis.)
- Ames: Iowa State College, 1943. 75 p. (Master's thesis.)
 62. WILBER, GORDON O. Evaluating in Industrial Arts Teacher Education. A Planning Study to Develop a Comprehensive Program of Appraisal in the Upper Division of an Institution Engaged in the Preparation of Industrial Arts Teachers. Columbus: Ohio State University, 1941. 470 p. (Doctor's dissertation.)
 63. WILLMOTT, JOHN W. High School Boys Electing Industrial Arts: A Study of Certain Factors Differentiating the Industrial Arts Group from the Group not Electing Industrial Arts. Contributions to Education No. 836. New York: Teachers College, Columbia University, 1941. 71 p.
 64. WININGER, WILLIAM H. Industrial Arts as a High School Elective Subject. Pittsburg Kans: Kansas State Teachers College. 1943. 33 p. (Master's thesis.)
- burg, Kans.: Kansas State Teachers College, 1943. 33 p. (Master's thesis.)
 65. Wirt, S. Edgar. Certain Factors in the Measurement of Visual Phorias. Lafayette, Ind.: Purdue University, 1942. 49 p. (Doctor's dissertation.)

CHAPTER IV

Oc

ch ha

te

th

qı

m

ir

Commercial Education

AGNES E. OSBORNE

No other field of secondary education is more varied in its scope than commercial education. The various subjectmatter fields in this area are listed in the October 1941 issue of the Review of Educational Research (26). The investigations cited in the summary presented in the present chapter have been classified under several headings, not necessarily mutually exclusive. No attempt is made in the present summary to consider unpublished research. Attention is called to Parker's (29), Pickett's (30, 31), and Turille's (43) bibliographies which include both published and unpublished research studies completed and in process.

Business Arithmetic

A significant study in this area of research was made by Orleans and Saxe (27). They based their report on some 2300 high-school students to whom they administered a test of fifty-five items covering computation, problem-solving, basic arithmetic concepts, recognition of business terminology, and clerical arithmetic. The authors found a low level of achievement. However, the major contribution of the study is a detailed analysis of the errors revealed. Besides having presented a tabulation of the frequently occurring wrong answers, Orleans and Saxe provided the actual processes by which these wrong answers were reached. They also offered interpretations in terms of the psychology of the learning that probably produced the results revealed. In general they inferred and concluded from their very detailed analysis that most learning of arithmetic has been meaningless and arbitrary and by rote procedures which resulted in rote mastery.

Consumer Education

Research in this field has made little progress despite the fact that widespread attention to consumer education problems in the classrooms has gained considerable headway during the last ten years. The need for studying specific problems is recognized by those planning and administering consumer education programs. Bream (3) presented a summary of an unpublished study in which he used the questionnaire to determine the needs of a particular community. These needs were set up as the primary objectives of the consumer program for the school. The survey showed that 87 percent of the 460 parents, alumni, and students who replied to questionnaires desired a thoro study of consumer problems in high school.

Shorthand, Typewriting, and Office Practice

Rowe (33) made an outstanding contribution to research by developing technics and equipment that made it possible for him to reveal some of the

characteristics of the writing of infrequently used words in Gregg short-hand. Considerable weight is given to his findings inasmuch as several technics were used to establish reliability of the conclusions. He invented the Scriptochron, a machine that measures the writing and pausing time in taking dictation, and he used motion picture records, a transfer test, a questionnaire, shorthand records, and controlled criteria to analyze the mental activities involved in writing shorthand and to study learning areas in relation to the construction of words. This doctoral dissertation laid the groundwork for a systematic attack on what has been one of the most elusive research problems to date dealing with shorthand learning.

The conclusion formed by Osborne (28) in her study of the value of certain psychological tests in the prediction of shorthand achievement of secondary-school students was that none of the correlations between the shorthand criterion and single psychological tests or between the criterion and combinations of psychological tests was high enough to make prediction valuable except in the negative sense. The data indicate that the cases selected for statistical analysis were representative of the enrolment in the shorthand classes enlisted in the project and that the reliability of the shorthand learning test which was used as the criterion of achievement was high enough to determine group differences. A tabular survey of correlations reported in related studies and an analysis of the results obtained by previous investigators in the field of shorthand prognosis may be of considerable value to future explorers in this area of research. Tuckman's study (42) revealed that there is a great deal of community between intelligence test scores and scores on the Turse Shorthand Aptitude Test. It is apparent that there is need for further analysis of the abilities and characteristics needed in learning shorthand and that there are components involved that have never been subjected to research. Mount (23) found that high-school shorthand is a definite aid in business college courses. He reported a saving of approximately 106 days in favor of the students who had had one year of shorthand in high school.

Deemer and Rulon (8) directed a technical investigation under the sponsorship of the Educational Research Corporation to determine the relative merits of Script shorthand and Gregg shorthand. The selection of sets of variables for different comparisons between the systems and of tests valid for measuring the differences between the groups under comparison was based on statistical studies. The experiment illustrates how informative and valuable research of this nature can become when efficient methods of statistical analyses are employed. Deemer and Rulon concluded that "in terms of the features examined in the study, Script shorthand exhibited substantially greater relative merits" (8: 266). They indicated, however, that considering follow-up results alone, there is little to choose between the two systems. It is recognized that this study may mark the beginning of a trend toward large-scale, cooperative investigations in commercial education that will contribute to the solution of problems which can be

undertaken only by those organizations, commissions, or committees which have a large capital outlay at their disposal and which have access to adequate professional and technical resources to accomplish their purpose.

A worthwhile start has been made in the use of time and motion studies in typewriting, and many leaders in this field are quite certain that typewriting research reported for the next triennium will include several studies of this type. Fundamentally significant in typewriting research for the present triennium is Fuller's study (13). He presented evidence to indicate that detailed word-recognition patterns are the basic reading patterns for typewriting. The author recognized that this theory conflicts with Dvorak's statements in Typewriting Behavior and with William Book's theory as expressed in The Psychology of Skill. DuFrain's investigation (9) favored the use of ten-minute typewriting tests for purposes of grading. Templeton's study (41) of the effect of directed typewriting practice on pupils' ability to read and spell is indicative of the type of experimentation that classroom teachers can do on the job.

The criteria set up by Spindler (38) to aid in the selection of business machines for a school laboratory were ranked in order of importance by 140 schools of various types. Inasmuch as the uses made of the business machines in the schools varied widely, it is evident that no standard basis for ranking the criteria was used. Nott (25) used the information secured from business firms in choosing machines for office practice classes. Lebeda (19) studied, analyzed, and interpreted courses of study in office practice in ten states. All of the results were based on library research.

Professional Status and Training of Commercial Teachers

Hunsinger (17) obtained data from 371 teacher-training institutions to determine current practices of selecting persons to be trained as commercial teachers. The commercial teaching curriculums of ninety-four state teachers colleges and normal schools were studied by Sipe (36) who secured data from college catalogs and state departments of public instruction. Martin (22) reported certification practices for teachers of business subjects in the United States and compared present standards with those listed by Brewington and Berg (4). Generally favorable trends in certification practices were indicated, altho the pattern has been changed to a degree by war emergency rulings. Nanassy's investigation (24) revealed that noncommercial teachers show higher averages than commercial teachers with respect to degrees held, years of teaching experience, and salaries received. Jones (18) based her study of the activities of teachers of business subjects on reports sent to the Ohio State Department of Education by high-school principals. The purpose of Selby's research (35) was to determine the extent to which colleges now offer shorthand and typewriting and some of the conditions under which these courses are offered.

Educational and Occupational Follow-Up Studies in Commercial Education

The general procedure followed in gathering data for follow-up studies and surveys has been to obtain opinions and facts thru interviews and questionnaires. An analysis of studies shows a general failure to report evidence as to the soundness of the interview and questionnaire procedures followed. The increasing interest of investigators in studying their own particular problems is encouraging, however, and should lead to a combination of studies that contribute to the over-all purpose of the undertakings. DeLancey (7) used the questionnaire and personal interview technics to ascertain whether the cooperative training program was meeting the needs of students and businessmen in a small community. Davis and Kirk (6) concluded from their follow-up study of former students who were on jobs that combination major fields open the doors to employment more quickly than a single major field. The primary purpose of Rittenhouse's investigation (32) was to secure data which would serve as a basis for reorganization of the commercial department. Replies from questionnaires indicated the need for business English, office practice, advanced typewriting, business machines, and secretarial training. The graduates of the secretarial department of a girls' college, according to Bennett (2), favored adding business law, insurance, and machine calculation to the secretarial curriculum. A follow-up study by Hertzfeld (15) of young men who had been out of school ten years or more indicated that they would eliminate foreign language and science, and they recommended a system of part-time employment. Rowse (34) summarized data from a twenty-year follow-up study of one entire graduating class of 229 young men. Reports were secured thru the questionnaire or personal follow-ups of 100 percent of the graduates. The duties performed by 371 high-school graduates who were engaged in twelve clerical occupations were charted by Fraser (12). Brewington and Berg (5) recorded some of the occupational and personal experiences of the women graduates of the University of Chicago School of Business. The purpose of the ten-year study of 5957 high-school alumni, which was directed by Stevens and Ruttman (39), was to obtain information that would be of value in occupational guidance and in the improvement of courses of study. The summarized report referred to in this chapter submits a great deal of information in the form of arithmetical tables but gives little interpretation of the data collected.

Surveys in Business Education

Gilbreth (14) secured data thru questionnaire from eighty-eight institutions engaged in preparing students to teach business subjects. In addition to summarizing and evaluating the student-teaching practices and policies followed, he offered recommendations regarding the main issues and gave supporting evidence in the form of authoritative references for his points of view. Ashby and Lawrence (1), Ewalt and Feller (10), Lock-

wood (21), Smith (37) have followed the more common practice of determining facts or discovering trends, but have placed less emphasis on evaluation of practices or procedures. Ewalt and Feller reported that thirty of the fifty-three Wisconsin high schools surveyed have organized placement systems and play an active part in placing their commercial graduates in business positions. Ashby and Lawrence summarized results of questionnaires returned by state departments of education in ten southern states relative to the status of business education in the small high schools in that area. Smith listed approximately two hundred activities that she found are common to office workers in sixty-six business organizations in "rather general order of frequency." Lockwood made a job analysis study of the work of 158 office employees. Each employee kept a record for one week of all the duties he performed each ten-minute period of the day.

Guidance of Students

The need for effective research in guidance has not been fully recognized by workers in the commercial education field. Certain trends are evident, but significant investigations are limited. Stump (40) reported data collected from approximately five hundred high-school students on the Cleeton Vocational Inventory. He concluded that traditional commercial courses must be supplemented by social-commercial courses and that high-school pupils should have access to reading materials on occupations which will acquaint them with opportunities in the commercial field. Ferguson (11) attempted to answer the question, "Is the business education department a dumping ground?" He concluded that the scholastic ability of students who have major interests in business subjects is equal to or above the average for the whole student body. Leith (20) summarized data from a section of a two-year study which was conducted in the Gary Public Schools that dealt with high-school students' understanding of basic concepts of economics. He stated that business training can improve the individual's ability to manage his own personal economic affairs competently. Hodges (16) evaluated the objectives, activities, past history, and probable trends of four national high-school subjectmatter societies, giving special consideration to the Future Business Leaders of America.

There is need for more carefully controlled studies in all areas of business education and particularly in content, methods, and materials in the subjectmatter fields. Application of results of valid research to actual class situations will undoubtedly bring about needed improvements in procedure and practice.

Bibliography

- Ashby, Wilson, and Lawrence, Armon J. "State Departments of Education and Business Education in Small High Schools of the South." Modern Business Education 8: 31-35; May 1942.
 Bennett, Louise A. "What Happens to a Secretarial Student After Graduation."
- Balance Sheet 25: 12-13; September 1943.

 Bream, Robert A. "A Comprehensive Consumer Education Program in Practice." Balance Sheet 25: 302-305; March 1944.

 Brewington, Ann, and Berg, Evelyn. State Certification of Teachers of Business Education. National Association of Business Teacher-Training Institutions, Bulletin No. 16. Akron, Ohio: University of Akron, May 1939. 31 p.

 Brewington, Ann, and Berg, Evelyn. The Women Graduates of a Collegiate School of Business. Chicago: University of Chicago Press. 99 p.

 Davis, Clifford M., and Kirk, Elisha. "A Follow-up of Bookkeeping Workers." Journal of Business Education 17: 25-26; February 1942.

Delancey, Opal H. "A Small High School Fits Its Curriculum to Current Demands." Balance Sheet 24: 157-59; December 1942.

8. Deemer, Walter L., and Rulon, Phillip J. An Experimental Comparison of Two Shorthand Systems. Harvard Studies in Education, No. 28. Cambridge: Harvard University Press, 1942. 294 p.

DUFRAIN, VIOLA. "Ten-Minute Versus Three-Minute Tests in Typewriting." Journal
of Business Education 18: 10-11; June 1943.

 EWALT, LORRAINE, and FELLER, ROBERT. "A Study of Placement Programs in Wisconsin High Schools." Bulletin of the Whitewater State Teachers Association. Commercial Education 27: 35-48; March 1942.

 FERGUSON, HAROLD. "Is the Business Education Department a Dumping Ground?" Balance Sheet 25: 200-202; January 1944.

 FRASER, THOMAS. "Can Your Students Hold Only One Job?" Journal of Business Education 18: 19-20; October 1942.

FULLER, DONALD. "Reading for Typewriting." Journal of Business Education 19: 19-21, September 1943; 19-20, October 1943; 11-12, November 1943.
 GILBRETH, HAROLD B. A Study of Student Teaching in Business Subjects in State

14. GILBRETH, HAROLD B. A Study of Student Teaching in Business Subjects in State Teachers Colleges, State Colleges and Universities, and Selected Private Colleges and Universities. National Association of Business Teacher-Training Institutions, Bulletin No. 25. Akron, Ohio: University of Akron, January 1942. 41 p.

 Hertzfeld, Arthur. "An Eleven Year Follow-up Study of Commercial Education." Journal of Business Education 17: 19-20; June 1942.

16. Hodges, William W. Comparative Analysis and Evaluation of National High School Subject-Matter Societies with Implications for the Future Business Leaders of America. National Association of Business Teacher-Training Institutions, Bulletin No. 28. Akron, Ohio: University of Akron, October 1942. p. 5-37.

17. HUNSINGER, MARJORIE. The Selection of Persons to be Trained as Teachers of Business Subjects. National Association of Business Teacher-Training Institutions. Bulletin No. 30. Akron. Ohio: University of Akron. May 1943. 33 n.

tions, Bulletin No. 30. Akron, Ohio: University of Akron, May 1943. 33 p.
18. Jones, Mary W. "Activities of Teachers of Business Subjects." Journal of Business Education 19: 20-21; December 1943.

 Lebeda, Agnes. "Office Practice in Ten States." Journal of Business Education 17: 24-26; January 1942.

 Leith, Harold. "The Personal Economic Background of High School Seniors." Journal of Business Education 17: 17-18; January 1942.

 LOCKWOOD, RICHARD B. "How Office Employees Spend Their Time." Journal of Business Education 16: 17-18; June 1941.

 MARTIN, THOMAS B. State Certification of Teachers of Business Education. National Association of Business Teacher-Training Institutions, Bulletin No. 31. Akron, Ohio: University of Akron, October 1943. 25 p.

MOUNT, DICK. "A Year of Shorthand Instruction Can Be Useful." Journal of Business Education 17: 15-16; February 1942.

 NANASSY, LOUIS C. "A Comparative Study of Commercial and Non-Commercial Teachers." Balance Sheet 24: 100-103; November 1942.

 NOTT, ELWOOD E. "Norwood Surveys Its Office Appliances." Journal of Business Education 17: 25-26; December 1941.

 ORLEANS, JACOB S. "Commercial Education." Review of Educational Research 10: 367-75; October 1941.

 ORLEANS, JACOB S., and SAXE, EMANUEL. An Analysis of the Arithmetic Knowledge of High School Pupils. City College Research Studies in Education, No. 2. New York: College of the City of New York, School of Education, 1943. 144 p.

- 28. OSBORNE, AGNES E. The Relationship Between Certain Psychological Tests and Shorthand Achievement, Contributions to Education No. 873, New York: Teachers
- College, Columbia University, 1943. 58 p.

 29. PARKER, GEORGE H. "Bibliography of Research Studies in Business Education in the South During the Past Two Years." Modern Business Education 7: 26-32; May 1941.
- 30. Pickett, Ralph R. Research Studies in Process, 1940-1941. A Bibliography. Na-
- tional Association of Business Teacher-Training Institutions, Bulletin No. 24.
 Akron, Ohio: University of Akron, December 1941. p. 20-28.
 31. Pickett, Ralph R. Research Studies in Process, 1941-1942. A Bibliography.
 National Association of Business Teacher-Training Institutions, Bulletin No. 27.
- Akron, Ohio: University of Akron, April 1942. p. 26-37.
 32. RITTENHOUSE, PEARL P. "Are Graduates Using Skills Learned in School?" Journal
- of Business Education 16: 17-18; April 1941.

 33. Rowe, Clyde E. The Writing of Infrequently Used Words in Shorthand. Contributions to Education No. 869. New York: Teachers College, Columbia Uni-
- versity, 1943. 90 p.
 34. Rowse, Edward J. "Twenty Years After Graduation." Balance Sheet 25: 103-105; November 1943.
- 35. Selby, Paul O. "Shorthand and Typewriting in Liberal Arts Colleges." Business Education World 24: 11-13; September 1943.
- 36. SIPE, JOHN M. Commercial Teacher-Training Curricula in 94 Accredited Teachers Colleges and Normal Schools in 1938. National Association of Business Teacher-Training Institutions, Bulletin No. 23. Akron, Ohio: University of Akron,
- July 1941. 39 p.
 37. Smith, Martha C. "Activities of the Office Worker." Modern Business Education
- 9: 16-18; November 1942.
 38. SPINDLER, CHARLES R. "Business Machines for School Laboratories." Journal of
- Business Education 18: 15-16, March 1943; 19-20, April 1943; 19-20, May 1943.

 39. Stevens, Marceline, and Ruttman, Walter, Educational and Occupational Follow-up Study. Monograph No. 60. Cincinnati: South-Western Publishing Co., 1943. 16 p.
- 40. STUMP, N. FRANKLIN. "Needed Guidance in Commercial Education." Journal of Business Education 17: 23-24; March 1942.
- TEMPLETON, WINIFRED. "The Effect of Directed Typing Practice on Pupils' Ability to Read and Spell." Balance Sheet 23: 218-19; January 1942.
 TUCKMAN, JACOB. "A Study of the Turse Shorthand Aptitude Test." Journal of Business Education 19: 17-18; November 1943.
- 43. TURILLE, STEPHEN J. Research Studies Completed and in Process. National Association of Business Teacher-Training Institutions, Bulletin No. 33. Akron, Ohio: University of Akron, May 1944. p. 27-36.

CHAPTER V

Agricultural Education

WILLIAM A. SMITH

Agricultural education is interpreted in this chapter as the program of instruction in agriculture given nationwide impetus in the secondary schools by the enactment of the Smith-Hughes Act in 1917, and subsequent contributory acts. Consequently, such education is relatively new as a curriculum in the secondary school and has faced numerous problems common to a rapidly developing and expanding program. Research conducted by those engaged in the program has contributed quite largely to the progress made and in the attempts to solve problems. Two publications (49, 50) prepared by a research committee of the agriculture section of the American Vocational Association summarize 757 studies completed up to and including 1940. More than one hundred additional studies completed since that time have been reviewed by the writer in preparing this chapter. Those studies completed during 1940 and included in the second volume of the published summaries (50) will not be referred to here.

While the chapter as a whole is devoted to research contributed by workers in vocational agriculture, the research itself is not limited in usefulness to that field alone. Neither is it assumed here that the only research significant to education in agriculture has been done by those engaged in vocational instruction in agriculture. The limitation imposed in the selection has been arbitrary. One particular example of a study having value outside the field of vocational agriculture is that of Starrak and Kneedy (55) concerning the status of instruction in general agriculture in the high schools of Iowa with recommendations for improvement of the program.

Planning Programs of Agricultural Education

The needs and characteristics of rural communities and areas provide the evidence for much of the program planning now being made. Hamlin (19) used local community resources not only for program planning but for subsequent evaluation of accomplishment. The need for establishment of departments of vocational agriculture in schools and communities continues to be an important aspect of program planning (5, 6, 15). Christy (5) based his recommendations upon the relationship of the educational programs of former pupils to their present occupations. Crandall (6) took account of the social, economic, and educational status of the population of a community in proposing additions and extensions to existing agricultural programs in the schools. Fobbs (15) found the Negro population in Mississippi to be very inadequately served in all types of classes in vocational agriculture. In only six of fifty-one counties of the state in 1940 did instruction reach 6 percent or more of the Negro farm population. Analysis of the human and agricultural resources of a seven-county area in West Virginia was used by Garr (17) to show the need for departments of the most efficient type for the various communities. Spellman (54) proposed a program of secondary education for Negroes in a North Carolina county to include agricultural education if pupil needs, occupationally,

socially, and economically, are to be met.

Hammonds (20) developed technics for interpreting agricultural census data by counties for use in planning and supervising a state program of vocational agriculture. The interpretations of such data have added usefulness in building courses of study in local areas. Robinson (53) used the report made by a land use committee in formulating a local program of instruction in vocational agriculture. Since such committees are relatively new, yet generally existent in agricultural areas, his procedure promises use of an added resource in program planning.

In occasional situations the program of instruction in vocational agriculture has necessitated the employment of more than one teacher. Kinzie (27) characterized such multiple-teacher departments as to program, enrolment, teacher qualifications, and other items useful in determining

need for organizing similar departments.

Evaluation of Instruction

Evaluating the effectiveness of instruction in vocational agriculture has challenged many teachers and leaders in the field, and seventy-eight studies dealing with this problem have been summarized and reported up to 1940 (49, 50). It is encouraging to find that evaluation is recognized as a long-time project (19), since in any education the values obtained are only partially evidenced immediately following instruction. This is particularly true in vocational education. Quite naturally the occupational distribution and status of former pupils should claim major attention in attempts to discover instructional outcomes of a program planned to prepare for farming. Wright (71) reviewed 106 researches in which occu-

pational outcomes were treated.

Follow-up studies of former pupils have provided significant data on the importance of pupil-background as a factor in occupational distribution (1, 39). Such environmental factors as land value and competition with industry, as well as the character of instruction, were found to be factors in occupational choice and status (28, 39). Factors which operated in one direction for white pupils did not necessarily operate in the same direction for Negro pupils (28). Weiler (68) studied a select group of former pupils to discover a favorable relationship between occupational status in farming and the criteria by which outstanding pupils in vocational agriculture are selected. While most follow-up studies in vocational agriculture have been concerned with the all-day pupil, Johnson (25) followed up former pupils of out-of-school classes in agriculture. Of the 58 percent who were not in the armed forces when the study was made, 73 percent were farming. His findings tally with those in similar studies—boys who farm tend to do so in their home communities.

Two evaluation studies have dealt with special phases of instruction in vocational agriculture. Haltom (18) and Webster (67) studied the effectiveness of instruction in farm machinery repair, the former for all-day pupils and the latter for out-of-school classes of young men and adults. Haltom showed the need for such instruction in departments of vocational agriculture to serve both in-school and out-of-school pupils. Webster was able to isolate factors affecting the success of instruction serving out-of-school groups.

The desired ultimate outcome of instruction in vocational agriculture is the establishment of pupils in satisfying farm vocations. Consequently, many studies have been designed to determine the extent and the nature of placement and establishment among former pupils, both as a measure of accomplishment and in order to discover the factors involved and the kinds and amounts of instruction needed to produce optimum establishment (7, 10, 39). In addition to the follow-up of former pupils, several investigators have studied the experiences and situations of farmers, beginning and established, to discover the factors operative in providing placement and establishment opportunities (7, 21). Knight (35) included related occupations among the placement opportunities investigated. Employers in the latter case urged that the schools provide additional preparation in agricultural and business skills and abilities.

Instruction for Out-of-School Groups

The program of vocational agriculture never has been confined to full-time pupils in the secondary school. However, if the amount and extent of research devoted to a particular phase of a program is any criterion, much less emphasis is placed on instruction for out-of-school groups. On the other hand, there is evidence that departments of vocational agriculture are emphasizing this phase of the program. Out-of-school groups include young men sixteen to twenty-five, and adult farmers. The former group usually is referred to as the part-time group, and adult instruction is

referred to as evening classes.

Byram (4) and Knight (31) in studies of rural youth in two states reported that out-of-school young men desired vocational preparation either as continuation of previous preparation or as a first experience in vocational courses. From an analysis made on a community basis, Crandall (6) recommended a continuation of agricultural instruction beyond the in-school period. The nature of the course of instruction, the teaching procedure, and technics for organizing classes were found to be primary factors in the success of young and adult farmer classes (9). Knight (33) drew similar conclusions for instruction serving rural youth. Parent (46) devoted considerable attention to the teacher as a factor in the success of adult classes. Older teachers with farm experience were found to have an advantage in working with adult farmers. Some have questioned the desirability or even the possibility of conducting classes for adult farmers

in an area over a period of consecutive years, but Robertson (52) reported experience in the same community over a sixteen-year period with a view to improving future instruction. Under the impetus of wartime conditions limiting the supply of farm machinery, out-of-school classes in machinery and equipment repair and construction have proved popular. Webster (67) arrived at factors involved in the success of such instruction as a result of experience in Vermont.

Learning thru Participation

Participative experience in real farming situations has a necessary and important place in agricultural education. This part of the pupil's instruction is referred to as supervised farm practice or his supervised farming program. In planning such experience activities, factors other than those dealing with pupil variation (14, 72) should be considered. The status of the parent in farming proved to be a significant factor of opportunity (26, 72). Thru selection of participative experiences, planning, supervision, and summarizing, the teacher can do much to insure successful learning outcomes (36, 59).

Teachers of vocational agriculture are employed thruout the year to permit the supervision of pupil participation in farming. The effectiveness of various procedures in supervision was reported by Jeppson (24) and Knight (36). In addition to individual pupil programs of supervised farming, group projects were used occasionally to provide a cooperative experience. Timmons (63) arrived at nineteen specific educational values growing out of this form of pupil participation. The promotional value of group projects in a community is a secondary outcome.

Guidance in Agricultural Education

Investigation of the relationship between educational preparation and subsequent occupational status revealed a need for guidance service (5, 6). An understanding of reasons for the withdrawal of youth from school (30), their activity interests and expressed needs (31), their occupational interests (58, 60), their attitudes toward agriculture (64), factors affecting occupational choice (68), and their abilities (5, 68), was found necessary, if vocational preparation in agriculture is to be effective. The importance of extending opportunities in agricultural education as well as of determining who best can be served by such instruction was the subject of several studies (31, 60). The expressed preference of pupils for various school subjects (29) should not be overlooked in guidance or in adapting instruction to meet the needs of pupils. Pupils who dropped out of school expressed an interest in educational opportunity to increase occupational self-sufficiency (37).

The Teacher in Agricultural Education

Because the teacher in agricultural education must work with the pupil in the home and on the farm as well as in the classroom the careful selec-

tion of prospective teachers is an important consideration in improving the effectiveness of instruction (9, 46, 67). Efferson (11) reviewed the research relating to the selection of teachers in agricultural education, and studied the relationship between preemployment background and subsequent teacher performance. Miller and Glick (40) developed a device for measuring interest in teaching agriculture to be used with the Strong Vocational Interest Test. Further validation of the device promises assistance in predicting probable teaching success. Fair (12) concluded that personality traits should receive greater attention in predicting teacher success. Programs for the preservice preparation of teachers in agriculture were the concern of Bender (2), Brunner (3), and Rhoad (51) in recent researches. Rhoad concluded that teachers upon completing their college preparation had not mastered technical skills, information, and the ability to apply pertinent information. Bender found a need for more participating experience covering a wider range of teacher problems as a part of the preservice preparation. Brunner developed criteria for use in evaluating programs of preparation. Preparation of the teacher must include development of understandings and abilities for such specialized teaching as adult and young farmer classes (8, 46, 70).

How does the teacher use his time during the summer between school sessions? Knight (32) and Wallace (65) reported the effect of wartime activities and restrictions upon the teacher's out-of-school program. Greater emphasis on organized teaching in special classes to step up food production has tended to reduce the time spent in other activities.

Nutt (45) and Pulley (47) found that tenure in teaching and professional improvement are significant factors in the professional advancement of teachers. Among the means used by teachers to obtain professional help and to improve local programs of work is the county organization of teachers (16). A number of activities lend themselves to cooperation on an area basis, but such programs often lack adequate planning. Teachers of agriculture, in common with other teachers, are not a well-paid group according to White (69). His survey of a group of teachers in Texas tends to confirm the generally accepted belief that the agriculture teacher has a total operating expense greater than that of most teachers and approximating his total income.

Wartime Influences in Agricultural Education

Emergency programs to relieve the shortage of labor and to increase food production have greatly affected vocational instruction in agriculture. Tilson (62) made use of his survey of labor needs in a Virginia county to discover needed modifications in instructional programs in agriculture for the area. Fife (13) and Knight (34) were concerned with the opinions and attitudes of employers of farm labor as well as with the characteristics and needs of the would-be laborers. Both kinds of information were used in developing labor training programs. Adult and young farmer classes

for the purpose of increasing food production decreased the amount of time teachers had to spend on prewartime activities (32), but called the attention of teachers to new services which might be rendered in their communities and suggested improved technics for conducting such classes (67).

Educational Value of Contests and Exhibits

Agricultural fairs and exhibits attract youth and the stimulating effect of competition has long been recognized as one result of such participation. The educational values to be gained from such participation have been recognized more slowly. Homann (22) made a case for agricultural fairs, state, sectional, and local, on the basis of their contribution to educational growth. Humphreys (23) obtained from participants in the national public speaking contest for Future Farmers of America an expression of what they considered to be the essential factors in public speaking as an educational activity.

Research Technics and Devices

Among the recent researches in agricultural education the following have emphasized the development of new instruments and technics, or have demonstrated the use of special devices: Myster (41) constructed a scale to measure attitude of boys toward farming; Vickerstaff (64) used a similar type of scale for which he obtained additional validating evidence; Miller and Glick (40) developed a scale to measure interest in teaching agriculture to be used in conjunction with the Strong Vocational Interest Test. While Miller and Glick considered their results to be tentative, their evaluation instrument is promising. Criteria for evaluating programs of teacher preparation resulted from Brunner's research (3). Practical suggestions for the use of evaluative devices, certain new technics of evaluation, and the exemplification of the jury technic are other outcomes which have value for both vocational and nonvocational education. Puls (48) developed criteria for gauging the responsibilities emphasized in supervisory programs by district supervisors in agricultural education. He claimed that the device could be used also as a means of evaluation and a basis for defining supervisory responsibilities. Myster (42) developed a technic for estimating the difficulty likely to be encountered by high-school pupils in reading the Agricultural Experiment Station Bulletins which frequently are used as materials of instruction in agricultural education classes.

Summary

Since this chapter is the first review of research in agricultural education to appear in the Review, it seemed desirable to suggest the diversity of problems worthy of study in this field. Experience and tradition provide only partial answers to such problems, and it is encouraging to find a tendency to seek solutions thru research.

A review of this kind makes evident certain needs in research. One such need is emphasized by Puls (48) when he states, "The profession is suffering because not enough of the right kind of studies are being made and those which have been made are not finding their way to the teachers in the field." A major contribution made by Wright (71) was his summary of more than one hundred studies relating to a single area of problems. All too often research workers do not take into account contributions previously made, and consequently, they are guilty of needless duplication. There is a need also to improve the character and quality of research. Too much emphasis is placed upon the examination of past experience. Too little effort is made to evaluate current experiences. Long-time research projects with periodical reports of progress may have greater future value than much of the prevalent short-term research. Cooperative research effort on a nationwide or regional basis is another need. Such an approach would tend to reduce duplication of effort and would insure over-all planning. direction, and dissemination sorely needed to improve the quality and significance of research.

Bibliography

1. Bartley, Huch J. A Follow-up Study of Pupils Enrolled in Vocational Agriculture in the High School at Mason, Michigan. East Lansing, Mich.: Michigan State College, 1942, 61 p. (Master's thesis.)

College, 1942. 61 p. (Master's thesis.)

2. Bender, Ralph E. "An Evaluation of the Participating Experiences in the Preservice Professional Training Program of Teachers of Vocational Agriculture at Ohio State University." Agricultural Education Magazine 15: 134-35, 137; January 1943.

3. Brunner, Henry S. Criteria for Evaluating Programs of Preparation for Teachers of Vocational Agriculture. Columbus: Ohio State University, 1943. 425 p. (Doctor's thesis.)

 Byram, Harold M. Out-of-School Young Men on Farms. State Board of Control for Vocational Education, Bulletin No. 274. Lansing, Mich.: the Board, 1941. 47 p.

 CHRISTY, J. MORRIS. Education and Present Occupations of Story County Eighthgrade Male Pupils of 1927-1928. Ames: Iowa State College, 1942. 90 p. (Master's thesis.)

6. CRANDALL, WILL G. A Study of a Rural Community for the Purpose of Determining
Some Factors That Should Be Considered in Providing Instruction in Vocational
Agriculture, Ithaca, N. Y.: Cornell University, 1941, 101 p. (Master's thesis.)

Agriculture. Ithaca, N. Y.: Cornell University, 1941. 101 p. (Master's thesis.)

7. Davis, Walter S. The Establishment of Negro Young Men in Farming: A Study of Opportunities and Qualifications of Negro Young Men for Becoming Established in Farming in West Tennessee. Ithaca, N. Y.: Cornell University, 1941. 120 p. (Doctor's thesis.)

8. DE WEES, WILLIAM I. The Training of Teachers for Adult and Young Farmer Instruction in Vocational Agriculture. State College, Pa.: Pennsylvania State College, 1942. 86 p. (Doctor's thesis.)

 DICKERSON, RUSSELL B. The Development of Vocational Education in Agriculture for Young and Adult Farmers in Pennsylvania for the Ten-Year Period, 1931 to 1941. State College, Pa.: Pennsylvania State College, 1943. 190 p. (Doctor's thesis.)

 DRAHEIM, ERWIN R. Factors of Parental Assistance and Cooperation Affecting the Establishment of Sons in Farming or Other Occupations—A Study of 181 Young Men in New York State. Ithaca, N. Y.: Cornell University, 1941. 211 p. (Doctor's thesis.)

11. EFFERSON, CARLOS A. The Relation of Certain Pre-Employment Background and Activity to Behavior as Teachers of Vocational Agriculture. Ithaca, N. Y.: Cornell University, 1942, 291 p. (Doctor's thesis.)

- 12. FAIR, EUGENE L. Factors that Contribute to the Failure of Negro Teachers of Vocational Agriculture in Texas. Ames: Iowa State College, 1943. 72 p. (Master's thesis.)
- 13. FIFE, RAY. The Employment of Student Labor. Columbus: Ohio State University,
- Department of Agricultural Education, 1943. 15 p.
 14. FLICKINGER, CHARLES F. The Association of Certain Boy, Family, Farm, and Program Factors with Rated Groups of Individual Farming Programs. Columbus:
- Ohio State University, 1942. 225 p. (Master's thesis.)

 15. Fobbs, Allen D. Availability of Vocational Education in Agriculture for Negroes in Mississippi. Ames: Iowa State College, 1942. 84 p. (Master's thesis.)
- FRIDAY, DALE T. County Programs in Vocational Agriculture. Columbus: Ohio State University, 1942. 66 p. (Master's thesis.)
- 17. GARR, MALCOLM C. Determining Potential Centers for Vocational Agriculture Departments in Eastern Panhandle Counties of West Virginia. Ithaca, N. Y .: Cornell University, 1941. 150 p. (Doctor's thesis.)
- 18. HALTOM, ALBERT A. A Comparison of the Machinery Repair Work Done on the Home Farm by Boys with and without Vocational Agricultural Training. Manhattan, Kans.: Kansas State College, 1942. 49 p. (Master's thesis.)
- 19. Hamlin, Herbert M. First and second annual reports of a five-year project in program-planning and evaluation in agricultural education. Urbana, Ill.: University of Illinois, Department of Agricultural Education, 1942 and 1944. 23 p. and 12 p.
- 20. Hammonds, Carsie. Interpreting 1940 Agricultural Census Data by Counties as a Basis for Course Building in Vocational Agriculture. Lexington, Ky.: University of Kentucky, College of Education, 1942. 142 p.
- 21. HATCH, JAMES W. Opportunities for Establishment in Farming Relative to the Needs of Young Men. Ithaca, N. Y.: Cornell University, 1941. 253 p. (Doctor's thesis.)
- 22. HOMANN, HAROLD W. Educational Values of Agricultural Fairs. Fort Collins, Colo .: Colorado State College of Agriculture and Mechanic Arts, 1942, 52 p.
- 23. HUMPHREYS, LEGRANDE R. Some Essential Factors in Public Speaking in the Program of the Future Farmers of America. Logan, Utah: Utah State Agricultural College, 1944. 7 p.
- 24. JEPPSON, R. B. A Program of Farm Practice Supervision for Vocational Agriculture Teachers in Nevada. Fort Collins, Colo.: Colorado State College of Agriculture and Mechanic Arts, 1940. 77 p.
- 25. Johnson, Rufus N. The Occupational Status and Distribution of Former Parttime Students in Vocational Agriculture. Baton Rouge, La.: Louisiana State University and Agricultural and Mechanical College, 1944. 79 p. (Master's
- 26. JOHNSON, JULIAN A. Comparison of Renters' Sons and Farm Owners' Sons as Possibilities for Satisfactory Farming Program in Vocational Agriculture. Manhattan, Kans.: Kansas State College, 1940. 45 p. (Master's thesis.)
- 27. Kinzie, Gilbert R. Mulciple-teacher Departments of Vocational Agriculture.
 Blacksburg, Va.: Virginia Polytechnic Institute, 1941. 70 p. (Master's thesis.)
 28. Kline, John M., Jr. A Study of the Effectiveness of Vocational Agriculture in Virginia as Measured by the Occupational Status of Former Students, Including the Evaluation of Some of the Influences on Occupational Selection. Blacksburg,
- Va.: Virginia Polytechnic Institute, 1942. 132 p. (Master's thesis.)

 29. KNICHT, EWART B. "Subject Preferences of Bural Boys." Tennessee Teacher 10: 14-15; February 1943.
- 30. KNIGHT, EWART B. "Why Rural Pupils Leave School." Nations Schools 30:41-42; October 1942.
- 31. KNIGHT, EWART B. "Tennessee's Rural Youth." Phi Delta Kappan 24: 226-28; January 1942.
- 32. Knight, Ewart B. Activities of a Group of Tennessee Teachers of Vocational Agriculture During a War-time Summer. Knoxville, Tenn.: University of Tennessee, Department of Agricultural Education, 1942. 47 p.

 33. Knight, Ewart B. Developing Educational Opportunities for Out-of-School Rural Young Men. Bulletin No. 9. Knoxville, Tenn.: University of Tennessee, Depart-
- ment of Agricultural Education, 1942. 44 p.

n-

0

33

io

'n

e

ŀ

n

٥.

a

y

e

e

9

- KNIGHT, EWART B. "High School Boys as Emergency Farm Labor." Agricultural Education Magazine 16: 194; April 1944.
- 35. KNIGHT, EWART B. "Placement Opportunities in Farming and Related Occupations for Tennessee Students of Vocational Agriculture." Occupations 20: 116-21; November 1941.
- 36. KNIGHT, EWART B. Procedures and Practices of Tennessee Teachers of Vocational
 Agriculture in Supervising Farming Programs of All-day Students. Knoxville
 Tenn.: University of Tennessee, Department of Agricultural Education, 1942.
 50 p.
- 37. KNIGHT, EWART B. Rural Young Men Who Attended Defense Training Classes in Tennessee. Knoxville, Tenn.: University of Tennessee, Department of Agricultural Education, 1941. 57 p.
- 38. KNOX, HARRY I. An Analysis of a Part-time Farming Community to the End of Meeting the Educational Needs of Non-farm Pupils Enrolled in the Curriculum in Vocational Agriculture. State College, Pa.: Pennsylvania State College, 1943. 67 p. (Master's thesis.)
- McCann, W. Harrison. A Study of the Occupational Status of Former Students of Vocational Agriculture in Virginia. Blacksburg, Va.: Virginia Polytechnic Institute, 1942. 82 p. (Master's thesis.)
- 40. MILLER, CHARLES W., and GLICK, WENDELL P. The Development of a Scale for the Strong Vocational Interest Test to Measure Basic Interests in Teaching Agriculture. Blacksburg, Va.: Virginia Polytechnic Institute, 1940. 419 p. (Master's thesis.)
- 41. MYSTER, ALONZO M. Construction and Validation of a Scale for the Measurement of Attitude toward Farming. Ames: Iowa State College, 1943. 142 p. (Doctor's thesis.)
- 42. MYSTER, Alonzo M. Reading Difficulty of Iowa Agricultural Experiment Station Bulletins. Ames: Iowa State College, 1941. 148 p. (Master's thesis.)
- 43. NICOL, MARVIN J. Establishment in Farming of Former Students of Vocational Agriculture in North-eastern Illinois as Farm Laborers and Partners on the Home Farm. Ames: Iowa State College, 1943. 91 p. (Master's thesis.)
- 44. NICOL, MELVIN J. Establishment in Farming of Former Students of Vocational Agriculture in Central Illinois as Tenants and Owners. Ames: Iowa State College, 1943, 66 p.
- lege, 1943. 66 p.

 45. Nutt, William F. Vocational Agriculture Teacher Personnel in Iowa. Ames:
 Iowa State College, 1943. 106 p. (Master's thesis.)
- PARENT, WEBER J. Certain Factors Influencing the Success of Evening School Work in Vocational Agriculture. Baton Rouge, La.: Louisiana State University and Agricultural and Mechanical College, 1941. 61 p. (Master's thesis.)
- 47. Pulley, Mason H. A Follow-up Study of Graduates, Post-graduates, and Those Qualified to Teach by Taking Certain Classes in Agricultural Education at Virginia Polytechnic Institute. Blacksburg, Va.: Virginia Polytechnic Institute, 1940. 86 p. (Master's thesis.)
- Puls, Elmer E. District Supervision in Vocational Education in Agriculture in Certain States in the Southern Region. Ithaca, N. Y.: Cornell University, 1943.
 p. (Doctor's thesis.)
- 49. RESEARCH COMMITTEE, ACRICULTURE SECTION, AMERICAN VOCATIONAL ASSOCIA-TION. Summaries of Studies in Agricultural Education. Vocational Education Bulletin No. 180, Agricultural Series No. 47. Washington, D. C.: Government Printing Office, 1935. 196 p.
- 50. Research Committee, Acriculture Section, American Vocational Association. Summaries of Studies in Agricultural Education. Supplement No. 1 to Vocational Education Bulletin No. 180. Danville, Ill.: Interstate Printers and Publishers 1043 100 pt.
- Publishers, 1943, 199 p.

 51. Rhoad, Claude E. A Study of the Comprehensiveness of Abilities in Technical Agriculture Attained by Prospective Teachers of Vocational Agriculture in Ohio Previous to Their Entrance into Student Teaching. Columbus: Ohio State University, 1943, 317 p. (Doctor's thesis.)
- versity, 1943. 317 p. (Doctor's thesis.)

 52. Robertson, William E. A Study of Evening School Work in Karns Community from 1927 to 1942. Knoxville, Tenn.: University of Tennessee, 1943. 188 p. (Master's thesis.)

- 53. ROBINSON, DONALD B. A Method of Using the Land Use Committee Recommenda.
- 53. ROBINSON, DONALD B. A Method of Using the Land Use Committee Recommendations in Planning a Program of Vocational Agriculture. Columbus: Ohio State University, 1942. 67 p. (Master's thesis.)
 54. Spellman, Cecil L. The Basis for a Program of Rural Secondary Education for Negroes in Wilson County, North Carolina, with Implications for Curriculum Content. Ithaca, N. Y.: Cornell University, 1942. 190 p. (Doctor's thesis.)
- STARRAK, JAMES A., and KNEEDY, MAX W. General Agriculture in the High Schools of Iowa. Bulletin, Agricultural Experiment Station. Ames: Iowa State College, 1944. 90 p.
- 56. STARRAK, JAMES A. Problems of Beginning Farmers in Iowa. Research Bulletin No. 313, Agricultural Experiment Station. Ames: Iowa State College, 1943, 66 p.
- Stone, Warren E. Methods by Which One Hundred and Twenty Men of Bazine and Highpoint Township of Ness County, Kansas, Became Established in Farming. Manhattan, Kans.: Kansas State College, 1941. 32 p. (Master's thesis.)
 Stringfield, Favrot G. Occupational Interests of High School Boys in Vernon
- Parish. Baton Rouge, La.: Louisiana State University, 1943, 61 p. (Master's thesis.)
- SWEANY, HARVEY P., and STARRAK, JAMES A. Supervised Practice in Vocational Agriculture in Iowa. Bulletin P 29 (New Series), Agricultural Experiment Sta-
- tion. Ames: Iowa State College, 1941. 32 p.

 60. TAYLOR, HARLEY F. Colored Youth in Rural Delaware. A Study of Their Situations and Interests with Suggestions for Improvement. State College, Pa.: Pennsylvania State College, 1942. 54 p. (Master's thesis.)

 61. TAYLOR, JOSEPH B. Worthwhile Training for Prospective Tenant Farmers. Fort Collins, Colo.: Colorado State College of Agriculture and Mechanic Arts, 1940.
- 59 p.
- TILSON, CHARLES E. War-time Labor Needs, Opportunities and Availability in Madison District as a Basis for a Program of Instruction in Vocational Agriculture, Charlotte County, Virginia. Blacksburg, Va.: Virginia Polytechnic Institute, 1942. 67 p. (Master's thesis.)
 TIMMONS, GUY E. Case Studies of Vocational Agriculture Group Projects in the School of the County of County Institute Group Projects in the School of County Institute Group Projects in the School of County Institute Group Projects in the County Institute Group Projects Institute Group Projects in the County Institute Group Projects Institute
- Saxton-Liberty High School. State College, Pa.: Pennsylvania State College, 1941. 54 p. (Master's thesis.)
- 64. VICKERSTAFF, SYLVESTER G. The Attitude of High School Boys toward Agriculture. Ames: Iowa State College, 1942. 37 p. (Master's thesis.)
- 65. WALLACE, MARION W. A Study of the Summer Teaching Load of Twenty-seven Teachers of Vocational Agriculture in Southwestern Ohio. Columbus: Ohio
- State University, 1942. 92 p. (Master's thesis.)

 66. WATERS, THAD H. An Argument for a Guidance Program in the Hammond High School, with a Suggested Procedure. Baton Rouge, La.: Louisiana State University and Agricultural and Mechanical College, 1942. 113 p. (Master's thesis.)
- 67. Webster, George E. The Discovery of Factors Involved in the Conduct of Courses for the Repair or Construction of Farm Machinery and Equipment—A Study of Vermont's Experience. Ithaca, N. Y.: Cornell University, 1943. 102 p. (Master's
- 68. Weiler, Warren G. A Study of the Students of Vocational Agriculture Who Have Been Awarded the Degree of State Farmer. Columbus: Ohio State University, 1941. 107 p. (Master's thesis.)
- WHITE, HARVEY C. Financial Status of a Group of Teachers of Vocational Agriculture in Texas. Fort Collins, Colo.: Colorado State College of Agriculture and Mechanic Arts, 1941. 68 p. (Master's thesis.)
 WOLF, WILLARD H. How Teachers Assist Young Farmers to Increase Their Net
- Worth. Columbus: Ohio State University, 1942. 129 p. (Master's thesis.)
- 71. WRIGHT, CARLTON E. Occupational Distribution, Entrance into Farming and Op-
- portunities for Farming, of Former Students of Vocational Agriculture. Ithaca, N. Y.: Cornell University, 1943. 572 p. (Doctor's thesis.)

 72. Young, Alton. Inhibiting Factors in Supervised Farm Practice. Fort Collins, Colo.: Colorado State College of Agriculture and Mechanic Arts, 1940. 82 p.

CHAPTER VI

The Social Studies

THE STUDIES REVIEWED in this chapter are organized under three headings:
(a) The Curriculum, (b) Methods of Learning and Teaching, and (c) Evaluation. This subject was last treated in the October 1941 issue of the REVIEW.

The Curriculum

HOWARD R. ANDERSON and BEATRICE M. SHUFELT

In any discussion of the curriculum, it is important to know what is being taught in the schools. A book by Bruner and others (5) reviewed selected courses of study; one by Giles, McCutchen, and Zechiel (22) analyzed the curriculums of the "thirty schools." Gavian (21) surveyed about nine hundred courses of study for Grades I to VI to determine emphasis placed on education for economic competence. She found that most courses stressed conventional aims but failed to make applications to real life situations. To improve the quality of instruction, Gavian made specific suggestions for teaching major topics in this field.

Bases for Determining Curriculum Content

Two recently published studies call attention to the importance of having lay committees share responsibility with teachers and administrators in planning the curriculum (50, 59).

The needs of pupils often are analyzed to determine desirable modifications of the school programs. In one of the studies reported by Lazarsfeld and Stanton (33), evidence was cited to show that students depend more on the radio as a news source than on newspapers, movies, or the school. Scott (48) investigated children's understanding of statistical concepts found in social studies texts. She found, for example, that many pupils disregarded the number and extent of deviations from the average and placed greater emphasis on the size of a sample than on its representative-

Doane (11), believing that maximum learning effectiveness is possible only when pupils are aware of the importance of a subject, sought to determine the extent of concern of youth over their needs. He found that high-school pupils placed far greater emphasis on vocational choice and getting along with people than on current problems. He also found that girls were more interested in personal problems than boys; boys, more interested in social problems than girls. Hetzel (30) studied the migration of the 1750 persons who had graduated from the Sumner, Iowa, High School between 1892 and 1940. His conclusion was that the course of study should not be planned primarily to meet local needs.

00

P

Ways of Organizing Courses

In developing a social studies curriculum, teachers should take into account the practical suggestions found in the Forty-First Yearbook (36). Preston (39) found that the evidence, tho meager and not fully conclusive, rather consistently favors the organization of unified courses in the social studies at the elementary-school level. In a study which was an outgrowth of the Stanford Social Education Investigation, Hanna (27) discovered that a problem-solving approach facilitated greater change in the behavioral pattern of pupils than did a topical approach. But she found much less conclusive evidence when the problems approach was compared with a chronological approach.

Grade Placement of Content

There is need for more research relating to the grade placement of content. One study (35) in this field dealt with the teachability of certain concepts in modern European history to ninth-, tenth-, and eleventh-grade pupils. The investigator concluded that school experience, as determined by grade, is an important factor in determining the ability of pupils to grasp concepts. Important recommendations for the teaching of American history in the schools and colleges were made in a report prepared under the direction of Wesley (41). This committee urged that American history be taught to all pupils in the middle grades, junior and senior high school, and drafted a differentiated program in terms of major themes, related topics, and skills appropriate to each level.

Regionalism and "Neglected Areas"

Among recent trends in the preparation of curriculum materials two only will be considered: (a) emphasis on regionalism, and (b) emphasis on so-called "neglected areas," i.e., Latin America, the Far East, the British Commonwealth, and Russia. Anyone who wishes to sense the scope and direction of the former movement should read the report of the Work-Conference on Southern Regional Studies and Education held at Gatlinsburg, Tennessee in 1943 (9). Specific recommendations for the study of the New England region are made in a study by Knapp (32).

Church (7) showed how knowledge and understanding of the Far East and its culture, institutions, and problems may be infiltrated into existing history courses. By combining the methods of the social anthropologist and the historian, Ewing (16) obtained a frame of reference for analyzing Chinese culture at various periods of history. In pointing out common elements from period to period, and by stressing changes, she showed that Chinese culture "makes sense" to the Chinese. This fact, she argued, must be understood by American youngsters if they are to develop a rational basis for "getting along" with other peoples.

Practical Helps

A study by Griffin (26), which concerned the subjectmatter preparation of history teachers, contains valuable suggestions for teaching that subject so that it will function in the lives of students. Walther (58) used the Winnetka chart for rating the difficulty of reading materials to determine the reading difficulty of magazines commonly recommended to high-school pupils. A list of books for slow learners in junior high-school American history was compiled by Carpenter (6). A list of important documents for high-school pupils of social studies was derived in a study by Fielstra (17).

Methods of Learning and Teaching

Previous annotations of research in methods in social studies were made by Hockett (31), Wilson (62), and Young (64). In this treatment of the subject much is omitted which was previously included. Studies of method in general education, surveys of practices, and organization of content are included in other parts of this issue. This survey deals largely with classroom research, or with research having immediate practical implications for the classroom teacher.

A study comparing two methods of instruction was made by Hatcher (29). Altho the experiment was carried on in the field of home economics, it has implications for all fields. The control classes were wholly directed by the teacher as to objectives, content, procedures, evaluation; the experimental classes maintained joint teacher-pupil selection of goals, procedures, and evaluation. One hundred and thirty-eight pairs of girls in consumer-buying classes were matched for I.Q., pretest scores on subjectmatter, and socio-economic status. Teachers chose the method they preferred and were given lessons in the two methods. After a month's instruction, achievement was measured by a test with a reliability of .91. The difference between mean scores of the groups had a critical ratio of 4.20 in favor of the experimental classes. In the opinion of Hatcher, diaries and interviews revealed more interest and better judgment on the part of the experimental groups.

The development of critical thinking is one of the cardinal objectives of education. In an experiment by Glaser (23) the main emphasis was placed on the development of teaching procedures which might be of immediate value to the classroom teacher. Students in four experimental classes, who had instruction in the guiding principles and processes of critical thinking, made significantly greater gains on the tests than students in the control classes. Glaser concluded that the aspect of critical thinking most susceptible to improvement is "the attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experience" (23:175). A description of research in the field of

critical thinking was made by Ellis (14).

Edgerton (12) found that experimental classes made significant changes toward support of civil liberties in time of war after one month's discussion of case situations; the gains persisted after a three-month interval. His report (13) on pupil attitudes toward controversial issues indicated that pupils showed a decided preference for teachers who curricularized controversial issues and rejected teachers who avoided such issues. They preferred teachers who waited to be asked for their opinions and liked least those who never expressed an opinion. The pupils indorsed discussion based on fact, exchanges of different points of view, training in research, greater use of community speakers. They rejected being thought too young to discuss such matters, the newspapers as unbiased sources of information, "sticking" to the textbook alone, parental fears, mere talk.

Time Concepts

Friedman (19, 20) made a survey of the variety, extent, and importance of time concepts in the life of the average child and adult. He found time concepts inadequate at all grade levels with maturation of understanding at the twelfth-grade level. Wilmeth (61) prepared materials for instruction designed to improve skill in using time expressions. Activities and exercises were included so that pupils might make active use of time expressions. The materials proved effective in a classroom experiment.

Graphs and Maps

Bamberger (3) directed a learning experiment to determine the effect of systematic instruction in graph interpretation upon the graph reading achievement of pupils in the fourth to seventh grades. She concluded that five weeks' instruction at each grade level was equivalent to a year's normal growth in graph reading ability acquired incidentally. Initial ability in graph reading was more a function of grade location than of mental age or I.Q. On the basis of her findings, she recommended that graphs should be used in Grade IV for simple identification; in Grade V for facilitating

simple comparisons; in Grade VI for complex comparisons.

Data secured from kindergarten children and adults were analyzed by Gregg (25) to discover reactions to cardinal directions. He found the adults geographically disoriented, struggling with mental maps. He urged that children in primary grades be taught games in which bodily responses to directions were made. By the use of a questionnaire checklist, Whipple (60) secured statements from teachers and supervisors regarding the elements of geography readiness important in Grades III and IV. Those most frequently mentioned were (a) an adequate experimental background; (b) an interest in the more concrete phases of geography; (c) good habits of observation; (d) beginning of reasoning ability; (e) a meaning vocabulary which includes the more common geographic terms; (f) ability in reading within one grade of a child's position in school; (g) at least potential ability to orient oneself spatially. Forsyth (18) prepared and used

experimentally pupil material on the reading of map scale and map network. Experimental classes made significant gains over control classes which learned the material incidentally.

Study Technics

The question of the effectiveness of various technics of study was investigated by Arnold (1) and Porter (38). Porter proposed to test the relative effectiveness of questions and their placement in directing study. His experimental group of 1045 eighth graders in thirteen schools was divided into six sections by the use of random numbers. All pupils read a prepared selection on tularemia, and either studied under guidance of main, or main and subordinate, questions, before or after the selection, or wrote the questions answered by the selection. He came to the conclusion that merely reading with intent to remember was about as effective as reading and studying under the guidance of questions. The suitability of the reading selection and the short length of the learning period should be considered in evaluating this experiment.

The comparative advantages of repetitive reading, underscoring, outlining, and precis writing as study technics were analyzed by Arnold (1). He reported no consistent superiority for any one technic. Reading and underscoring showed a tendency to be superior for immediate recall, and outlining showed a tendency toward lower scores for all groupings of

students. No reliability was reported for the tests used.

The School Excursion

A well-designed and carefully executed study of the contribution of the excursion to understanding was made by Curtis (10) with a group of thirty-two fifth-grade children. In both his control and experimental classes a highly illustrated class procedure was used to amplify and enrich the subjectmatter, which was concerned with soil erosion and soil conservation. The content was divided into four units, with each unit treated as a separate experiment. In each of the four experiments the entire population was resampled and divided into control and experimental groups. He found that the excursions increased the ability of pupils to apply principles to abstract and concrete problems of erosion and conservation of soil; to report relationships on conditions of erosion and conservation of soil; to apply a greater number of the total number of principles involved; and to penetrate more deeply the problems treated. The excursion technic did not enable the pupils to apply more pertinent principles—to see relationships of more direct consequence or more specific application. An average of twenty additional minutes of excursion procedure resulted in approximately twice the understanding obtained by the average hour of classroom procedure. He recommended the use of the excursion as a major technic of instruction where the community affords accessible illustrations of subjectmatter, especially in cases where the concrete experiences of pupils have been limited.

Clark (8) made an experimental evaluation of the school excursion at the elementary-school level. Nine teachers from different Minneapolis schools taught 335 pupils the content of four units on Egypt, printing. transportation, and communication. By a rotation plan each school acted as control group for half of the units, and as an experimental group for the other half. Information tests, interest tests, pupils' free reactions, and anecdotal records were used in evaluation. Comparison of pre- and posttest scores indicated that the experimental groups were significantly superior on all but the first unit. The control group was significantly superior to the group which made the excursion to the museum. In view of the fact that the museum offers one of the most common excursions, and that Atyeo in 1939 found it effective, this study leaves the question still open. Interest tests revealed no significant differences; neither were there significant differences on absolute or relative retention. Children's voluntary reactions indicated that the students who went on excursions recorded more items which interested them and more activities in which they would like to take part.

A thoro canvass of sources of information on a single community was reported by Romoda (42).

Audio-Visual Aids

Goodman (24) compared experimentally the effectiveness of sound and silent motion pictures, silent and sound film slides when used in teaching safety education to sixth-grade pupils. By a rotation group method each of the classes was exposed to a different medium in a different safety subject on four consecutive days. All four mediums were found to be effective devices. The silent motion picture produced the largest gains for both immediate and delayed recall. It was superior to the sound motion picture and the sound film slide for immediate recall. The silent film slide was superior to the two sound mediums for immediate recall, but not necessarily for delayed recall.

A series of studies on the use of phonographic recordings was reported by Rulon and others (44, 45, 46, 47). In general, the conclusions were that printed materials gave greater gains than phonographic recordings in terms of knowledge alone, altho the superior gains were reduced to nothing in a week's time; that records did not show superior results in teaching the informational part of material "for which they are said to be peculiarly adapted both as to content and purpose"; that records were not superior to a subjectmatter presentation using printed material in terms of motivation to further study; that use of phonographic records influenced the students to adopt more neutral attitudes toward the Germans and less favorable attitudes toward Hitler. It is possible that other research workers may criticize the choice of records in these studies.

A capable and thoro review of research on radio and records in education was made by Reid and Day (40).

Evaluation

HARRIET C. STULL and HOWARD R. ANDERSON

It is difficult to discuss evaluation in the social studies without duplicating material included in the February 1944 issue of the Review which concerned itself with "Psychological Tests and Their Uses." Because the discussion in this section may seem incomplete, readers are urged to refer to the issue of the Review just cited.

Practical Helps

A study by Traxler (54) calls attention to the failure of teachers to grade semiobjective tests accurately. Rosander (43) developed tables for scoring test questions (chronology, for example) which require the answers to be given in a specific order. Plowman and Stroud (37) found that pupils who had learned whether or not their responses to objective test questions were correct made a substantially better showing on a retest one week later than did pupils in a control group whose corrected papers had not been returned. A short-cut in the collection of data on attitudes and behavior is suggested by Van Alstyne (57) who developed a situation rating scale which gave a rate-rerate correlation of .87 after two weeks, and which permitted observers to make many more observations than if the anecdotal method had been used.

Reading Ability and Achievement in Social Studies

In a study involving ninth-grade pupils, Shores (49) sought to determine the skills related to the ability to read history and science. He concluded that it is unwarranted to speak of general reading ability without describing the content field in which the reading is done. Artley (2), on the other hand, found that in general the ability to read general informative material is associated with the ability to read social studies material, and that an adequate measure of comprehension in social studies may be made with a test of general reading comprehension. These men experimented with pupils at different grade levels and did not use the same tests.

Eskridge (15) discovered that a pupil may have difficulty on multiple choice tests because he has mastered only one of several meanings of a term, and that with respect to that meaning he may have difficulty because he does not recognize it when the meaning is expressed in a certain way with which he is not familiar. In a study involving college freshmen, Bear and Odbert (4) discovered that students missed on a vocabulary test 44 percent of the words which they had claimed they knew when reading a selection containing the words, and only 64 percent of the words which they had checked as not understood. That the reader's attitude toward the person discussed in a story affects his interpretation of the content read was revealed in an experiment reported by McCaul (34).

Efforts To Measure Newer Values

Persons responsible for the development of testing programs in the social studies should read the clear-cut statement on purposes, underlying assumptions, and procedures in evaluation written by Tyler (55) and should note the newer types of evaluation instruments listed and discussed by Wrightstone (63). Chapters II and III on "Appraising and Recording Student Progress" (51) contain a detailed account of the steps followed in developing and validating tests used in the Eight-Year Study: Interpretation of Data, Application of Principles of Logical Reasoning, Nature of Proof, Ability to Apply Social Values, Applying Social Facts and Generalizations to Social Problems, and Beliefs on Social Issues. A detailed description of procedures for evaluating the skills of critical thinking was provided by Taba (53) in the Thirteenth Yearbook of the National Council for the Social Studies.

Harding (28) reported the development of a test for securing information concerning types of values manifested in generalized attitudes. The test used included about forty statements for each of ten categories. Splithalf reliabilities for the ten tests varied from .76 to .95.

The following study, tho in the field of science, suggests a general type of procedure which can readily be used by social studies teachers. A unit of study on communicable diseases was used with an experimental group of ninth-grade pupils. The control group received no instruction but the behavior of pupils in both groups was checked before and after instruction thru observations and interviews. Urban (56) reported that the experimental group made a highly significant gain in the direction of better health habits, and that this gain continued after twelve weeks even the much of the information contained in the instructional material had been forgotten.

Stull (52) studied the relation between sympathetic role-taking behavior and certain aspects of democratic behavior of sixth-grade pupils. Scales were constructed to measure sympathetic role-taking and four types of democratic behavior: "own rights," "rights of others," "share in decisions," and "independence of teacher." Correlations between role-taking and the first three of the foregoing scales were significant at the 1 percent level (52:129). Scales such as those developed in this study may serve to make teachers more conscious of and to help them evaluate this form of behavior in their pupils.

Bibliography

- Arnold, Henry F. "The Comparative Effectiveness of Certain Study Techniques in the Field of History." Journal of Educational Psychology 33: 449-57; September 1942.
- Artley, A. Sterl. "A Study of Certain Relationships Existing Between General Reading Comprehension and Reading Comprehension in a Specific Subject Matter Area." Journal of Educational Research 37: 464-73; February 1944.

- Bamberger, Sister Clara F., S. C. N. Interpretation of Graphs at the Elementary School Level. Educational Research Monographs, Vol. 13, No. 1. Washington, D. C.: Catholic University of America, 1942. 62 p.
 Bear, Robert M., and Odbert, Henry S. "Insight of Older Pupils into Their Knowledge of Word Meanings." School Review 49: 754-60; December 1941.
- 5. BRUNER, HERBERT B., and OTHERS. What Our Schools Are Teaching. New York:
- Teachers College, Columbia University, 1941. 226 p.
 6. CARPENTER, HELEN M. Gateway to American History: an Annotated List of Books for Slow Learners in Junior High School. New York: H. W. Wilson Co., 1942.
- 7. CHURCH, ALFRED M. "The Schools and the Far East." Harvard Educational Re-
- view 11: 431-46; October 1941.

 8. CLARK, ELLA C. "An Experimental Evaluation of the School Excursion." Journal of Experimental Education 12: 10-19; September 1943.
- 9. COMMITTEE ON SOUTHERN REGIONAL STUDIES AND EDUCATION OF THE AMERICAN COUNCIL ON EDUCATION. Preparation, Distribution and Use of Instructional Materials Relating to the Resources of the Southern Region. Washington, D. C.: the Council, 1943. 88 p. (Typewritten.)

 10. CURTIS, DWIGHT K. The Contribution of the Excursion to Understanding. 2 vols.
- Doctor's thesis. Iowa City: University of Iowa, 1942. 835 p. (Typewritten.)
- 11. DOANE, DONALD C. The Needs of Youth: an Evaluation for Curriculum Purposes. Contributions to Education No. 848. New York: Teachers College, Columbia University, 1942. 150 p.

 12. Edgerton, Ronald B. An Experimental Study of the Modifiability of the Attitudes
- of Junior High Pupils Toward Civil Liberties in Time of War Through the Handling of Controversial Issues in the Classroom. Doctor's thesis. Madison: Uni-
- versity of Wisconsin, 1942, 209 p. (Typewritten.)

 13. EDGERTON, RONALD B. "Do Pupils Want Teaching of Controversial Issues?"

 Clearing House 18: 332-34; February 1944.
- 14. Ellis, Elmer. "Methods and Materials for Developing Skill in Critical Thinking." Teaching Critical Thinking in the Social Studies. Thirteenth Yearbook, National Council for the Social Studies, Washington, D. C.: the Council, 1942. Part Two, p. 49-92
- 15. ESKRIDGE, THOMAS J., JR. "The Factor of Verbalization-a Further Limitation of the Multiple Choice Test." Journal of Educational Research 35: 326-33; Jan-
- EWING, ETHEL E. An Interpretation of Chinese Culture for American Secondary School Pupils. Doctor's thesis. Ithaca, N. Y.: Cornell University, 1944. 213 p. (Typewritten.)
- 17. FIELSTRA, CLARENCE. "Important Political Documents in Social Studies for Secondary Schools." Social Education 8: 76-78; February 1944.
- 18. FORSYTH, ELAINE. An Experiment in the Teaching of Certain Map Reading Skills at the Junior High School Level. Doctor's thesis. Ithaca, N. Y.: Cornell Uni-
- versity, 1943, 173 p. (Typewritten.)
 19. FRIEDMAN, KAPPEL C. "Growth of Time Concepts." Social Education 8: 29-31; January 1944.
- 20. FRIEDMAN, KAPPEL C. "Time Concepts of Elementary-School Children." Elementary School Journal 44: 337-42; February 1944.
- GAVIAN, RUTH W. Education for Economic Competence in Grades I to VI: An Analysis of Courses of Study Illustrated with Sample Materials. Contributions to Education No. 854. New York: Teachers College, Columbia University, 1942. 190 p.
- 22. GILES, HARRY H.; McCutchen, S. P.; and Zechiel, A. Norris. Exploring the
- Curriculum. New York: Harper and Brothers, 1942. 362 p.
 23. GLASER, EDWARD M. An Experiment in the Development of Critical Thinking.
 Contributions to Education No. 843. New York: Teachers College, Columbia University, 1941. 212 p.
- 24. GOODMAN, DAVID J. "Comparative Effectiveness of Pictorial Teaching Aids. An Experimental Investigation in Safety Education at the Elementary School Level."

 Journal of Experimental Education 12: 20-25; September 1943.

 25. Gregg, Fred M. "An Important Principle in Teaching Primary Grade Geography."
- Elementary School Journal 41: 665-70; May 1941.

- 26. GRIFFIN, ALAN F. A Philosophical Approach to the Subject-Matter Preparation of Teachers of History. Doctor's dissertation, Columbus: Ohio State University, 1942. (Typewritten.)
- 27. HANNA, LAVONE A. The Problem Solving Approach in Social Education: A Study of Its Value in Comparison with Topical and Chronological Approaches. Doc-
- tor's thesis. Stanford University, Calif.: Stanford University, 1943. (Typewritten.)

 28. HARDING, LOWRY W. "A Value-Type Generalization Test." Journal of Social Psychology 19: 53-79; February 1944.

 29. HATCHER, HAZEL M. "An Experimental Study to Determine the Relative Effective-
- ness at the Secondary School Level of Two Methods of Instruction." Journal of Experimental Education 10: 41-47; September 1941.
- 30. HETZEL, WALTER L. "Geographical Study of All Graduates of an Iowa High School." School Review 50: 294-97; April 1942.
- HOCKETT, JOHN A. "Curriculum Investigation: tional Research 7: 165-71, 219-22; April 1937. JOHN A. "Curriculum Investigation: Social Studies." Review of Educa-
- 32. KNAPP, ROYCE H. American Regionalism and the Social Studies in New England Schools. Doctor's thesis. Cambridge, Mass.: Harvard University, 1943. 167 p. (Typewritten.)
- 33. LAZARSFELD, PAUL F., and STANTON, FRANK N., editors. Radio Research, 1941. New
- York: Duell, Sloan, and Pearce, 1941. 333 p.

 34. McCaul, Robert L., Jr. "Effect of Attitudes upon Reading Interpretation." Journal of Educational Research 37: 451-57; Feb. uary 1944.
- 35. McNamara, Sister Justa. The Teachability of Certain Concepts in Modern European History in the Secondary School. Johns Hopkins University Studies in Education, No. 33. Baltimore: Johns Hopkins Press, 1943. 172 p.
- 36. NATIONAL SOCIETY FOR THE STUDY OF EDUCATION. The Psychology of Learning. Forty-First Yearbook, Part II. Bloomington, Ill.: Public School Publishing Co., 1942, 506 p.
- 37. PLOWMAN, LETHA, and STROUD, JAMES B. "Effect of Informing Pupils of the Correctness of Their Responses to Objective Test Questions." Journal of Educational Research 36: 16-20; September 1942.
- 38. PORTER, WILLIS P. The Relative Effectiveness of Questions and Their Placement in Directing Study. Doctor's thesis. Iowa City: University of Iowa, 1942. 240 p. (Typewritten.)
- PRESTON, RALPH C. "An Appraisal of Fusion of Social Studies in the Elementary School." Elementary School Journal 44: 202-207; December 1943.
- 40. Reid, Seerley, and Day, Daniel. "Radio and Records in Education." Review of Educational Résearch 12: 305-22; June 1942.
- 41. REPORT OF THE COMMITTEE ON AMERICAN HISTORY IN SCHOOLS AND COLLEGES OF THE AMERICAN HISTORICAL ASSOCIATION, THE MISSISSIPPI VALLEY HISTORICAL ASSOCIATION, and THE NATIONAL COUNCIL FOR THE SOCIAL STUDIES. American History in Schools and Colleges. New York: Macmillan Co., 1944. 148 p.
- 42. ROMODA, JOSEPH J. Sources of Information on a Community Available from Governmental and Social Service Agencies: A Study of Municipal, County, State, Federal and Miscellaneous Data Pertaining to a New York State City, with Special Reference to Use in Schools. Doctor's thesis. Syracuse: Syracuse Uni-
- versity, 1942, 360 p. (Typewritten.)
 43. Rosander, Arlyn C. "A Simple Method of Scoring and Interpreting Sequential Responses." Journal of Educational Research 36: 168-77; November 1942.
- 44. RULON, PHILLIP J., and OTHERS. "Comparison of Phonographic Recordings with Printed Material in Terms of Knowledge Gained from Their Use Alone." Harvard Educational Review 13: 63-76; January 1943.
- RULON, PHILLIP J., and OTHERS. "Comparison of Phonographic Recordings with Printed Material in Terms of Knowledge Gained through Their Use in a Teaching Unit." Havard Educational Review 13: 163-75; March 1943.
- 46. RULON, PHILLIP J., and OTHERS. "Comparison of Phonographic Recordings with Printed Material in Terms of Motivation to Further Study." Harvard Educational Review 13: 246-55; May 1943.
- 47. RULON, PHILLIP J., and OTHERS. "The Effect of Phonographic Recordings upon Attitudes." Harvard Educational Review 14: 20-37; January 1944.

- 48. Scott, Lucy. A Study of Children's Understanding of Certain Statistical Concepts in Social Studies. Doctor's thesis. Iowa City: University of Iowa, 1942. 211 p. (Typewritten.)
- 49. SHORES, JAMES H. "Skills Related to the Ability to Read History and Science." Journal of Educational Research 36: 584-93; April 1943.
- 50. SIMPSON, ALFRED D.; PORTER-SHIRLEY, C. H.; and ALLEN, JAMES E., JR. Schools of the People. Cambridge, Mass.: Committee on Publications, Harvard Graduate School of Education, 1943. 219 p.
- 51. SMITH, EUGENE R., and OTHERS. Appraising and Recording Student Progress. New York: Harper and Brothers, 1942. 550 p.
- 52. STULL, HARRIET C. A Study of the Relation between Sympathetic Role Taking Behavior and Certain Aspects of Democratic Behavior of Sixth Grade Students.
 Ithaca, N. Y.: Cornell University, 1943. 182 p. (Doctor's thesis.)
 53. TABA, HILDA. "The Evaluation of Critical Thinking." Teaching Critical Thinking."
- 53. TABA, HILDA. The Evaluation of Critical Ininking. Feaching Critical Intinking in the Social Studies. Thirteenth Yearbook, National Council for the Social Studies. Washington, D. C.: the Council, 1942. Part Four, p. 123-75.
 54. TRAXLER, ARTHUR E. "Note on the Accuracy of Teachers' Scoring of Semi-Objective Tests." Journal of Educational Research 37: 212-13; November 1943.
- 55. TYLER, RALPH W. "General Statement on Evaluation." Journal of Educational Psychology 35: 492-501: March 1942.
- 56. URBAN, JOHN. "Can Learning Bring about Changes in Overt Behavior?" Science
- Education 27: 96-99; November 1943.

 57. VAN ALSTYNE, DOROTHY, "A Record for Describing Attitudes and Behavior in the High School." Journal of Educational Research 35: 276-86; December 1941.

 58. WALTHER, CYRILLA. "The Reading Difficulty of Magazines." School Review 51:
- 100-105; February 1943.
- 59. WASHBURN, CARLETON. Louisiana Looks at Its Schools: a Summary Report of the Louisiana Educational Survey. Baton Rouge, La.: Louisiana Educational Survey Commission, 1942. 198 p.
- 60. WHIPPLE, GERTRUDE. "Elements in Geography Readiness." Elementary School Journal 42: 256-67; December 1941.
- WILMETH, JOHN R. An Experiment in Teaching Time Relations in Junior High School American History. Doctor's thesis. Ithaca, N. Y.: Cornell University, 1943. 124 p. (Typewritten.)
- WILSON, HOWARD E., and OTHERS. "Social Studies." Review of Educational Research 7: 510-18, 568-71, December 1937; 8: 67-73, 98-100, February 1938.
 WRIGHTSTONE, J. WAYNE. "Techniques for Measuring Newer Values in Educa-
- tion." Journal of Educational Research 35: 517-24; March 1942.
 64. YOUNG, WILLIAM E. "Methods of Learning and Teaching." Review of Educational Research 11: 446-58; October 1941.

CHAPTER VII

Trends in Social Education

fo

ai

CHAPTERS VI AND VII were planned to cover important lines of research in teaching the social studies. All of the studies reviewed might have been included in a single, logically organized chapter, but for purposes of emphasis it seems better to treat separately research bearing on the topics included in Chapter VII.

The Development of Attitudes in Social Education

WILBUR F. MURRA

A major objective of social studies instruction is the development of desirable social attitudes. Despite general recognition of the importance of this aim, little is known about how it can be achieved. To date, most research has been directed toward the end of devising instruments for the measurement of attitudes. Most such studies have gone no further than the description of existing attitudes, but a few have measured attitude changes and have attempted to relate such changes casually to school instruction, home influence, or other factors.

In this section only a few of the studies reported during the past three years are mentioned. Attention is focused on those which are most directly related to social studies instruction. Research devoted to attitude tests as such is omitted. This type of research was well covered by Darley and Anderson (27) and by Traxler (83) in an earlier issue of the REVIEW OF EDUCATIONAL RESEARCH.

Student Attitudes on Social Issues

Except for attitudes directly related to the war, no other field of social attitudes has received as much attention from educational workers as has the field of racial and religious prejudice and related attitudes. Levinson and Sanford (58) discovered a high incidence of anti-Semitism among college women, the irrational nature of the trait being shown by its internal contradictions and inconsistencies. Sappenfeld (80) found that the attitudes actually held by students belonging to each of the three principal American religious faiths—Catholicism, Protestantism, and Judaism—vary greatly from the attitudes which they are presumed to hold in the opinions of members of the other two groups. He concluded that anyone's estimate of another person's attitude is distorted by the influence of stereotypes.

Elementary- and secondary-school textbooks were examined by a Harvard University seminar under Allport and others (1). Numerous passages were found which the investigators identified as "sources of race prejudice in the child." A far more elaborate appraisal of teaching materials (textbooks, other books, films, music, current events papers) on the elementary, secondary, and college levels was carried out by a com-

mittee of scholars under the direction of Wilson (56). The committee found that the materials contain numerous passages and implications deleterious to the inculcation of favorable attitudes toward the people and nations of Latin America and toward the Spanish-speaking population of the United States. Carpenter (16) presented evidence that textbooks in American history tend to give white students an inadequate and often inaccurate picture of Negroes in the United States.

Dyer (29) interviewed 101 ninth-grade children and subjected their responses to the critical analysis of twenty adult judges to determine the extent and nature of the children's prejudices. A considerable amount of prejudice was found, each child's attitudes being characterized by internal inconsistency. The race attitudes of white college students were compared with those of Negro college students by Holmes (46); and a similar comparison on the high-school level was reported by Boynton and Mayo (12).

The two most important and inclusive studies of intercultural education published in this country during the past three years (4, 86) have much to say about the role of intergroup attitudes. Both books summarize research in this field and contain numerous concrete suggestions for teachers interested in improving their students' attitudes and behavior. A particularly pertinent analysis of the problem is Wattenberg's chapter, "Forming Attitudes," in Americans All (4: 25-41).

Students' attitudes toward democracy and liberalism are reported incidentally in several studies, and at least three investigations dealt directly with these issues. Hill and Ackiss (45) found that one hundred Negro college students subscribed heartily to liberal and democratic principles in general but that they evidenced contradictory opinions on specific issues. Kibby (51) measured the attitudes of 985 students in a four-year junior college, as well as those held by 101 of their parents, and by 51 members of local service clubs. Two of his findings were at variance with the results of most previous research; he found that the possession of liberal attitudes correlated positively with family income and that parents tended to be more liberal than their children. The latter finding is corroborated in part by Mitchell's data (62) showing that youth hold less favorable attitudes toward the ideal of freedom of the press than do their teachers and members of a Rotary Club.

A pre-Pearl Harbor study of high-school students' attitudes toward other nations was reported by Orr (73). Her conclusion was that, next to the home, the textbook is the most important factor in forming the international attitudes of adolescent children. The effect of the war on student attitudes toward Germans, Japanese, Jews, and Nazis was reported by Remmers (78). Having tested a group of college sophomores in 1935, the investigator repeated the test with another, and presumably comparable, group of sophomores in 1942. He found, as expected, that approval of Japanese and Nazis declined sharply, but there was no significant change toward

Oct

wh

COL

fie

re

ve

of

01

to

the Jews and Germans. The author commented particularly on the students' differentiation between "Nazis" and "Germans" both in 1935 and in 1942. The generally favorable attitude toward the Germans even when Germany and the United States were at war is so surprising that other investigations would seem to be in order to examine other samples of our population. Both in 1935 and in 1942 the students expressed more liking for Germans as a group than for Jews.

One of the topics about which student attitudes were frequently elicited in the 1930's was war and peace. Jones (49) tested several groups of college students and some high-school students about two weeks after Pearl Harbor and compared the results with those obtained in testing other groups in other years. He found a sharp change toward greater militarism, but responses indicative of idealistic, humanitarian, and economic opposition to war were as strong and as numerous in mid-December 1941 as they had

been before.

Several investigations, of which only one is cited, have been designed to determine the attitudes of students toward the second World War (81). The results, while interesting and undoubtedly helpful to teachers in the specific situations involved, varied so much from one study to another that no generalizations are warranted. Perhaps the most significant investigations of war attitudes have been those concerned with the definition, analysis, and measurement of morale. By mid-1943 so many new studies had been reported in this field that it required more than fifty pages in a scholarly journal to summarize them (2, 38). One of these studies, with a high degree of relevance for the problems of the social studies classroom, is "The Morale Study of the State College of Washington" conducted under the direction of Lee J. Cronbach (23, 24, 25, 26).

Beginning in January 1942, Cronbach undertook to measure—at successive periods for the duration of the war—the morale of high-school students in various parts of the United States. He assumed that the essential elements in morale are "confidence and optimism, tempered by a realistic recognition of the difficulties that are to be faced," and devised a scale to measure these factors. He found that "pupils are more pessimistic than the facts warrant" (25: 301) and that they are "more emotional than need be" (24: 419). By 1943, however, Cronbach observed a general trend toward improved morale among the students studied; test results showed them to be more realistic and more confident than they had been earlier.

An important contribution to the literature on student morale is the Twenty-Second Yearbook of the American Association of School Administrators (76). The not a research study, strictly speaking, it is based on the collective opinions of experts and is rich in suggestions for a positive program of morale building in the social studies classroom. This yearbook cites a number of published research studies and concludes from them that "there is ample evidence that pupils' attitudes on basic social and civic issues can be changed by their school experiences" (76: 312); else-

where it declares, "Schools can change attitudes; they can and should combat prejudice. Some of the most insidious forms of attack on morale lie in this realm" (p. 182), and "There is no field of study where the possibilities of education for morale are more significant than in the field of the social studies" (p. 219).

Curriculum planners can learn much about the needs for curriculum revision by studying their students' outlook on the future. An extensive investigation in this area, on the college level, is now under way as part of the Cooperative Study in General Education. One phase of the study, appraising students' attitudes on postwar reconstruction, has been reported by Levi (57). Another study of the same nature, on the secondary level by Boodish (11), revealed that high-school boys tend to be overoptimistic in their hopes for personal vocational success and that they fail to see the connection between broad social trends and their own futures. A highly revealing picture of the attitudes of high-school youth on a wide variety of social and political issues related to democracy and the war was presented in Fortune (36), and widely commented on elsewhere.

Elementary-school pupils were found by Jacks (48) to hold much stronger attitudes of disapproval toward offenses against private individuals than toward the same offenses against corporations. The same pattern of discrimination was found in conservative middle-class communities and in pupils from upper-income families as was found in a mining town and in pupils from low-income families.

Relation of Social Attitudes to Social Studies Instruction

There have been discouragingly few investigations of the relation between attitudes and instruction. One elaborate study of this type reported during the past triennium is that of Heise (44), who measured the effect of direct instruction in cooperation, according to the technic proposed by Courtis, in a controlled experiment involving pupils in Grades V thru XII. The experimental group showed significant favorable gains in attitudes, knowledge, and performance, but not in efficiency. An incidental finding of the study revealed that there appears to be a natural growth in cooperative attitudes from the lower to the higher grades.

Billings (9) found that definite attitude gains were achieved by a group of junior-college women during a two-month seminar on social problems conducted by a "laboratory method" involving roundtable discussions and field trips. A control group was also measured, but this group was initially inferior to the experimental group both in attitudes and in scholastic aptitude. In addition to the evaluations made at the time of the initial experiment (1939), both groups were tested again three years later, whereupon it was revealed that both the experimental and control groups had lost about the same amounts in attitudes. Fitch and Remmers (35), using a pretest-retest technic, found that college freshmen acquired attitudes

significantly more favorable to government reform during a semester course in "American Institutions."

Bateman and Remmers (7) found that the attitudes of high-school seniors could be shifted by systematic presentation of propaganda. After negative propaganda the students' attitudes changed as expected, and the attitudes of the same pupils switched in the opposite direction after they had been subjected to positive propaganda. Two months later the same group was again tested, with results indicating that the negative attitudes seemed to have been more permanently established than the positive attitudes in spite of the fact that the positive propaganda had been presented after the negative propaganda.

Young women studying at Bennington College were found to develop definitely less conservative attitudes on political and economic questions during their college experience (69). Newcomb, who reported this study, which is a model of thoro and incisive analysis, observed that "the change is significant by the usual statistical test, and is considerably greater than that found in other colleges comparable to Bennington." He further pointed out that, while the student group as a whole shifted and while nearly all individuals shifted in the same direction, seniors were still as heterogeneous in their attitudes as were freshmen. A follow-up study of students from one to four years out of college revealed a remarkable degree of persistency for the attitudes which these students had held as seniors.

The influence of social studies teachers' attitudes on the attitudes of their students was studied by Mason (61) in a well-planned investigation on the secondary-school level. His findings, derived by the pretest-retest technic and using control groups, pointed unmistakably to the conclusion that the attitudes of teachers do influence the attitudes of their pupils even when there is no deliberate attempt to modify pupil views. Finally, there are implications for teaching in the study cited by Allport and Veltfort (2:169), that a group of Boy Scouts preferred to participate in those war service activities which they thought would make the greatest contribution to the war effort.

Methodological Studies

After reading hundreds of recently published studies in attitude research, one cannot fail to note that most research workers are primarily concerned with procedures and with measuring instruments. Three methodological studies, however, will be cited because they are fairly comprehensive, synthesize many of the more detailed investigations which preceded them, and offer practical guidance to teachers of social studies.

Riker (79) classified the methods used in attitude research as either "logical" or "empirical." After pointing out that "empirical" methods are usually regarded as superior, and that they are far more time-consuming, he presented evidence to show that substantially the same results can be obtained by the simpler "logical" methods. Two extremely helpful, non-

technical summaries of research technics especially written for classroom teachers are those by Corey (21) and by Kuhlen and Thompson (55).

Participation as a Phase of Social Education

HOWARD E. WILSON

A mounting belief in the importance of direct participation in school and community living as planned phases of education for democratic citizenship continues to be reflected in educational literature. While the war has interfered with some participatory activities, as in the case of field trips, it has stimulated activity in other areas, as in the community services demanded by total war. The February 1943 issue of the Review of Educational Research presented analyses of research bearing on this field. In that volume Havighurst and Davis (43) dealt with the school as one agency in the socialization of children, and Cook (19) presented an imposing summary of studies dealing with pupils' participation in community life.

Most of the writing on education thru "planned participation in constructive group action" tends to be exhortatory and descriptive. Helpful suggestions are made in the report on social studies teaching in wartime prepared by a group of sixty teachers in New England (90). A clear and more expanded statement of the civic implications of group work and community service is presented by Troyer (84).

Educational magazines of the past three years have carried numerous descriptions of specific instances of participation. Many of these descriptions are uncritical, optimistic, naive; others involve serious evaluation of the procedures and activities reported. Among the useful specific reports are those by Beneway (8), Calkin (15), Crewson (22), Harvey (42), Lex (59), Stowell (82), and Ward (89). An illuminating descriptive survey of 167 instances of community service used for educative ends is reported by Mitchell (63). Kelley (50) reported a survey of student government agencies in which he found adult control overemphasized. The 1943 Yearbook of the Department of Elementary School Principals (28) contains descriptions of a considerable number of promising school practices involving participation.

Tools and guides for surveys of community life by pupils continue to appear. Two bulletins, useful in patterning a survey, have been issued by the U. S. Office of Education (39) and the National League of Women Voters (68). Both of these guides deal with community structures and institutions more than with processes. As Cook (19) reported in February 1943, there continues to be "emphasis on external social facts and conditions rather than on divergent group norms and values." This is true despite rising interest in improved intercultural relations among the groups com-

posing American society.

Gregg (40) stressed the close relation of civic competence and occupational adjustment. Ogle (72) surveyed the use of community resources in

senior high-school social studies in St. Louis County, Missouri, with some attention to the nature and influence of public opinion. Wilson (92) analyzed the development of critical thinking thru conscientious and self-evaluative participation in school and community activities. Burton (14) presented an excellent systematic overview of "The Community as a Source of Learning Experiences and Materials." An excellent and comprehensive listing of organizations and agencies interested in this field and a bibliography of literature pertaining to it has been made available by Epler (33).

The most outstanding study in this field was the report by Blackwell (10) prepared in connection with the teacher education study of the American Council on Education. Blackwell reported and evaluated the community education projects in operation during 1942-43 in sixteen universities. His report covered (a) comprehensive courses on community life, (b) types of off-campus experience, (c) instances of social action by student-faculty groups, (d) readjustments in student government and college life, and (e) college-community cooperative enterprises. He discerned three major goals operative in these various plans—the objective of giving students "a body of facts about a local community and the characteristic behavior of its residents": the study and practice of "the particular group technics and methods that are essential to modern living on a democratic basis": and the development in students of a "sense of responsibility for sharing in community life and working on community problems." Especially valuable is his list of eight suggested criteria for the evaluation of college activities in this area.

Effects of the War on the Social Studies

MERRILL F. HARTSHORN

The survey, as presented in this section, necessarily leaves out much relevant literature. There have been a great many case studies reported in educational journals, and many reports issued by state and local curriculum departments, which set forth adjustments made in the social studies field to meet the need for a vitalized program of civic education in wartime. Reported here are selected studies of some of the better practices. Other studies may be located thru the *Education Index*, under the various subheadings under "Social Sciences" and under "War and Education." As yet, few carefully controlled research studies in this area have materialized.

Activities of Groups and Organizations

The most fundamental and comprehensive statement on wartime policy for the social studies was prepared by a committee of one hundred of the National Council for the Social Studies (65). The responsibility of the social studies in dealing with the problems of the war and reconstruction, and in developing an informed, purposeful citizenry, are clearly recognized

in this report. The committee concludes that it is thru the social studies that the schools have one of the closest ties with the war effort and the

building of the peace.

A committee of the American Political Science Association prepared a report on the political science curriculum in wartime (54) in which they concluded that there should be no rush to introduce new courses, that good teaching at any time will be done thru keeping abreast of the times and introducing new developments into the framework of existing courses. The need is to revitalize courses providing experiences that lead to real understanding and appreciation of the democratic way of life, encouraging students to participate in student government and community life. A committee of the American Sociological Society (94) drafted a report on wartime adjustments in college sociology teaching in which they concluded that, in cases of needed emphasis in the social science curriculum occasioned by the war, needed readjustments will come in most instances, not from adding "war courses," but rather thru changes in content and emphasis in courses already given.

The Research Division of the National Education Association (66: 41), in a study of changes in the school curriculum after a year of war, found that out of 1401 schools reporting, 38.1 percent reported that the social studies were receiving increased attention and emphasis. Social studies placed seventh in the list of courses reporting increased attention. Everett, in the Review of Educational Research (34), examined a sampling of educational programs that have been moving in the direction of a more adequate social education. Carr and Mallam (17), reporting research studies on the effects of the war on American education, found that few studies were of sufficient scope to warrant any far-reaching conclusions; that most of the studies that had been made deal with the effect of the war

on students.

The work of the National Council for the Social Studies, in assisting teachers with current problems of the war and the peace, was reviewed by Hartshorn (41), and an example of the work being done by local social studies organizations was described by Ellwood (31). Both of these articles show that organized groups of social studies teachers are sensitive to the times and are actively engaged in meeting the problems occasioned by the war.

Myer and Coss (64) stated that hope for the future lies in the adoption of a nationwide campaign of political enlightenment, involving people of all ages in every walk of life; that if democracy is to survive, the political education of the masses must proceed, step by step, with mechanical and military advances.

Preinduction training in the social studies has received considerable attention. A committee of the National Council for the Social Studies prepared a manual on preinduction orientation with the collaboration of the U. S. Office of Education and the War Department (75), a digest of which

0

appeared in Education for Victory (30). The skills and understandings which the soldier needs to become an effective fighter, as defined by the Army in its postinduction training program, were carefully analyzed and evaluated. On the basis of this analysis of Army needs, a carefully prepared social studies preinduction orientation program was designed to facilitate the educational program of the Army. Emphasis was placed upon developing understandings of the background, conduct, and issues of the war, and upon understanding the nature of military life. King (52) reported on curriculum adjustments in Cleveland to provide for preinduction training in the social studies. Existing courses were redirected by eliminating some old material and adding new topics; little in the way of new courses was added.

The role of education and the responsibility of the schools for wartime consumer education, with many implications for the social studies, was set forth in some detail with emphasis on, and concrete suggestions for, action by the schools in the Bulletin (13). The National Council for the Social Studies, reacting to teachers' wartime needs, has produced valuable material. Chase (18), in analyzing the elementary social studies curriculum, found that the impact of the war has called attention to four important aspects of the social studies: (a) the war as part of our curriculum, (b) democratic living, (c) friendliness toward other people, and (d) the world setting of modern life. Babcock, Jeffery, and Troelstrup (5) prepared a unit on war finance containing a historical study of postwar finance with teaching aid suggestions. Watters (91) presented the arguments for the necessity for study of international affairs in secondary schools and pointed out the special significance of this topic in the social studies.

Of a different nature are the numerous reports dealing with problems of education and world citizenship and the postwar world, which carry with them very definite implications for the social studies. Among the most influential of these have been the statements of the Educational Policies Commission (67), the International Education Assembly (47), and the Universities Committee on Postwar International Problems (85). The thesis of the report of the Educational Policies Commission is that if the objectives of this war are to be realized, there must be a systematic and deliberate extension of educational opportunity with the direction of this education toward peaceful and democratic ends.

Activities of Curriculum Departments

A vast amount of material has been issued by state and local curriculum departments dealing with adjustments of the curriculum to the war and preparing for the peace. Only a few selected samples of such material follow. The War Issues Committee of the Baltimore Public Schools (6) prepared an extensive report dealing with educational adjustments to the war and postwar problems. They clearly recognize the obligation of the schools to direct the thinking of pupils toward problems of peace and

doing this thru careful curriculum planning. Emphasis is placed upon the topics, "Education for the Air Age," "Impact of the War upon Baltimore," "Maintaining Morale," "Economic Factors in War and Peace," and "Planning for the Peace." The Bureau of Curriculum Development, New York State, (70, 71) prepared several mimeographed studies dealing with adinsting the elementary curriculum to the war as a carefully planned part of the state's twelve-year program in social studies. The State Wartime Studies Committee jointly with the State Department of Public Instruction of Wisconsin (93) emphasized planning a careful sequence for the entire twelve-year program. A survey of the social studies curriculum at all grade levels showed much wasteful duplication and overlapping with other areas of instruction. This evil had grown with changing conditions and new problems which immediately resulted in the introduction of units on a particular topic at every grade level and in several areas of instruction. Adapting the Missouri Courses of Study in the Social Studies to the Wartime Emergency (53) pointed out areas in the social studies curriculum in which greater emphasis is needed with suggestions as to how these topics may be introduced into the curriculum.

Descriptions of Some Wartime Practices

Numerous articles of a descriptive nature have appeared, which report on adjustments made in courses to fit them to the needs of war and peace. Alpern (3) found, in an examination of a number of school curriculums, that social studies programs are not existing as usual. Rehage (77) reported increased attention at all grade levels to the numerous problems raised by the war, and described a student-faculty "war activities committee" set up to conduct the war efforts of the school. Walton (88) found that Virginia schools have emphasized the study of inflation, air-mindedness, and international relations. Vitcha (87) described a program for the junior high school, designed for students from a low-income group, where the teaching was undertaken not only to create desirable pupil attitudes and understanding of the war, but also to influence adult opinion in the home where parents possessed a very limited educational background.

Gerlach (37) presented the results of a questionnaire sent to eighty-eight Dallas social studies teachers to ascertain their reorientation in teaching the social studies in wartime. The results showed that teachers were introducing definite changes in their teaching, which had been occasioned by needed war and peace emphases. Corey (20), on the basis of 650 questions submitted by pupils regarding the war, found that pupils are very much alert to the war and its problems. The report suggests some very practical and immediate contributions which social studies teachers can make to further the war effort. Lindahl (60) conducted a survey among 1054 fourth-, fifth-, and sixth-grade children in Indiana and found that

78 percent listened to war news on the radio; 77 percent liked to go to the movies showing war pictures; 52 percent read war news in the newspaper; and 75 percent think often about the war. The inference is that social studies teachers must not shut pupils off from the war, but rather, definitely, should teach the facts about the war. English (32) analyzed the weaknesses of the present social studies program as brought out by the depression and the war, and concluded that we need an expanded constructive program to prepare "participating citizens." Picklesimer (74) pointed out the effect of the war on geography and suggested that a new concept of a dynamic geography is emerging which must be carefully evaluated.

Bibliography

- Allfort, Gordon W., and others. A B C's of Scapegoating. Chicago: Central YMCA College, 1944. 72 p.
 Allfort, Gordon W., and Veltfort, Helene R. "Social Psychology and the Civilian War Effort." Journal of Social Psychology 18: 165-233; August 1943.
 Alfern, Hymen. "Teaching the Issues, Aims, and Progress of the War and the Peace." Bulletin of the National Association of Secondary-School Principals 26: 185-92; October 1942.
- ARNDT, CHRISTIAN O., chairman. Americans All: Studies in Intercultural Educa-tion. Washington, D. C.: Department of Supervision and Curriculum Development, a department of the National Education Association (formerly the De-
- partment of Supervisors and Directors of Instruction), 1942, 385 p.

 5. Babcock, Chester D.: Jeffery, Eber; and Troelstrup, Archie W. Paying for the War. Bulletin No. 18. Washington, D. C.: National Council for the Social Studies, a department of the National Education Association, 1942. 69 p.
- BALTIMORE DEPARTMENT OF EDUCATION, WAR ISSUES COMMITTEE. Educational Adjustment to War and Post-War Conditions. Baltimore, Md.: the Department, 1943. 238 p.
- BATEMAN, RICHARD M., and REMMERS, HERMANN H. "A Study of the Shifting Attitude of High School Students When Subjected to Favorable and Unfavorable Propaganda." Journal of Social Psychology 13: 395-406; May 1941.
 BENEWAY, JAMES. "New York State Young People Face Youths' Problems." Adult
- Education Bulletin 8: 67-69; February 1944.

 9. BILLINGS, ELIZABETH L. "Influence of a Social-Studies Experiment on Student Attitudes." School and Society 56: 557-60; December 5, 1942.
- 10. BLACKWELL, GORDON W. Toward Community Understanding. Washington, D. C .: American Council on Education, 1943. 99 p.

 11. Boodish, H. "Youth Thinks of the Future." School Review 51: 530-32; November
- BOYNTON, PAUL L., and MAYO, GEORGE D. "Comparison of Certain Attitudinal Responses of White and Negro High School Students on Race Problems." Journal
- of Negro Education 11: 487-94; October 1942. 13. BULLETIN OF THE NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS. "War-
- Time Consumer Education." Bulletin of the National Association of Secondary-School Principals 26: 2-113; November 1942.
- 14. Burton, William H. The Guidance of Learning Activities. New York: D. Appleton-Century Co., 1944. Chapter 21, "The Community as a Source of Learning Ex-
- periences and Materials."

 15. CALKIN, HOMER L. "Local History: A Means of Better Understanding United States History." School Review 50: 53-60; January 1942.
- CARPENTER, MARIE E. The Treatment of the Negro in American History School Textbooks. Menasha, Wis.: George Banta Publishing Co., 1941. 137 p.
 CARR, WILLIAM G., and MALLAM, MARY L. "Effects of the World War on American Education." Review of Educational Research 13: 13-20; February 1943.
- CHASE, W. LINWOOD. Wartime Social Studies in the Elementary School. Curriculum Series, No. 3. Washington, D. C.: National Council for the Social Studies, a department of the National Education Association, 1943. 51 p.

- 19. COOK, LLOYD A. "Education for Community Unity and Action." Review of Educational Research 13: 48-60; February 1943.
- 20. COREY, STEPHEN M. "Children's Questions and the War." School Review 50: 257-63; April 1942.
- 21. Corey, Stephen M. "Measuring Attitudes in the Classroom." Elementary School Journal 43: 457-61; April 1943. 22. Crewson, Walter S. "Field Work in Secondary School Geography." Journal of
- Geography 40: 154-56; April 1941.
- CRONBACH, LEE J. Exploring the Wartime Morale of High-School Youth. Applied Psychology Monographs, No. 1. Stanford University, Calif.: Stanford University
- Press, 1943. 79 p.
 24. CRONBACH, LEE J. "Pupil Morale After One Year of War." School and Society 57:
- 416-20; April 10, 1943. 25. CRONBACH, LEE J. "Wartime Morale of High School Youth." Social Education 6:
- 301-303; November 1942.
 26. CRONBACH, LEE J. "The Wartime Morale of Youth; An Analysis of the School's Problem." School and Society 55: 303-308; March 14, 1942.
- 27. DARLEY, JOHN G., and ANDERSON, GORDON V. "Applications of Personality and Character Measurement." Review of Educational Research 14: 67-80; February 1944.
- 28. DEPARTMENT OF ELEMENTARY SCHOOL PRINCIPALS, NATIONAL EDUCATION ASSOCIA-TION. Elementary Schools: the Frontline of Democracy. Twenty-Second Year-book. Washington, D. C.: the Department, 1943. 350 p.
- Dyer, Henry S. Observable Evidence of Prejudice in Ninth Grade Children. Cambridge, Mass.: Graduate School of Education, Harvard University, 1941. 214 p. (Doctor's thesis.)
- 30. EDUCATION FOR VICTORY. "Pre-Induction Orientation to Army Life." Education for
- Victory 2: 5-7, 22-26; December 15, 1943.
 31. ELLWOOD, ROBERT S. "A Social-Studies Organization in Wartime." Illinois Education 30: 202, 224; March 1942.
- 32. English, W. Francis. "The Social Studies Program in Wartime." Bulletin of the National Association of Secondary-School Principals 26: 66-71; December 1942.
- 33. EPLER, STEPHEN E. The Teacher, the School, the Community: An Annotated Directory and Bibliography. Washington, D. C.: American Council on Education, 1941. 55 p.
- 34. EVERETT, SAMUEL. "Adapting the School to the Changing Social Scene." Review of
- Educational Research 13: 38-47; February 1943.

 35. Firch, Loring, and Remmers, Hermann H. "What the College Student Thinks of Government." Journal of Social Psychology 14: 187-94; August 1941.
- 36. FORTUNE. "Fortune Survey." Fortune 26: 8-10, November 1942; 26: 8-10, December 1942.
- Gerlach, Dorothy. "Teaching the Social Studies in Wartime." Bulletin of the National Association of Secondary-School Principals 26: 30-36; October 1942.
- 38. GILLILAND, ADAM R. "A Brief Review of Recent Morale Studies." Journal of Social Psychology 17: 355-58; May 1943.
- 39. GOODYKOONTZ, BESS. Know Your Community. U. S. Office of Education, Know Your School Series, Leaslet No. 57. Washington, D. C.: Government Printing
- Office, 1941. 35 p.

 40. GRECG, RUSSELL T. "Civic Competence and Occupational Adjustment in the Secondary School." School Review 49: 337-48; May 1941.

 41. HARTSHORN, MERRILL F. "The Social Studies Must Hold the Peace." The Coun-
- cilor 5: 15-17; January 1944.

 42. Harvey, C. C. "How a High School Used Its Community as a Laboratory for Social Education." Social Education 7: 71-73; February 1943.
- 143. Havighurst, Robert J., and Davis, Allison. "Child Socialization and the School."

 Review of Educational Research 13: 29-37; February 1943.

 44. Heise, Bryan. Effects of Instruction in Cooperation on the Attitudes and Conduct
- of Children. Ann Arbor, Mich.: University of Michigan Press, 1942. 98 p.
 45. Hill, Mozell C., and Ackiss, Thelma D. "Some Ideological Confusion Among Negro College Students." Journal of Negro Education 12: 600-606; October 1943.

(

- 46. Holmes, Jean B. A Study of Racial Attitudes Found in Four Colleges, Including a Scale to Measure These Attitudes. State College, Pa.: Pennsylvania State College, 1941. 43 p. (Master's thesis.)
- 47. International Education Assembly. Education for International Security. 1943.
- 48. JACKS, ROBERT W. A Comparison of the Attitudes of Pupils Toward Offenses Against Private Individuals and the Same Offenses Against Corporations. State College, Pa.: Pennsylvania State College, 1943. 87 p. (Doctor's thesis.)
- 49. JONES, VERNON. "The Nature of Changes in Attitudes of College Students Toward War Over an Eleven-Year Period." Journal of Educational Psychology 33: 481-94; October 1942.
- 50. KELLEY, EARL C. Student Cooperation. New York: National Self Government Com-
- mittee, 1941. 20 p.
 51. Kibby, Leo P. "A Comparative Study of the Attitudes of Students, Parents, and Citizen Groups Toward Problems Situations Which Have Risen at the Ventura Junior College." Journal of the American Association of Collegiate Registrars
- 18: 149-58; January 1943.
 52. King, Allen Y. "Pre-Induction Training in the Social Studies." Teachers College Record 45: 154-60; December 1943.
- 53. King, Lloyd W., and others. Adapting the Missouri Courses of Study in the Social Studies to the Wartime Emergency. Jefferson City: Missouri State Department of Education, 1942. 39 p.
- 54. KIRKPATRICK, EVRON M., and OTHERS. "The Political Science Curriculum in War-
- time." American Political Science Review 36: 1142-46; December 1942.

 55. Kuhlen, Raymond G., and Thompson, George G. "Studying Attitudes in the Classroom: Some Suggestions for Teachers in Wartime." Educational Method 22: 359-65; May 1943.
- Latin America in School and College Teaching Materials. Report of the Committee on the Study of Teaching Materials on Inter-American Subjects. Washington, D. C.: American Council on Education, 1944.
- 57. LEVI, ALBERT W. "Social Beliefs of College Students." Journal of Higher Education 15: 127-34; March 1944
- LEVINSON, DANIEL J., and SANFORD, R. NEVITT. "A Scale for the Measurement of Anti-Semitism." Journal of Psychology 17: 339-70; April 1944.
- 59. Lex, W. B. "Citizens, Schools Cooperate on Election Project." National Municipal Review 33: 37-39; January 1944.
 60. LINDAHL, HANNAH M. "What Are Children Thinking About the War?" Progressive
- Education 20: 108-10; March 1943.
- MASON, HARRY M. Effects of Attitudes of High School Teachers of Social Studies
 Upon Attitudes of Their Pupils. Studies in Higher Education, No. 45. Lafayette,
 Ind.: Purdue University, Division of Educational Reference, 1942. 65 p.
 MITCHELL, CLAUDE. "Attitudes of High-School Pupils toward the Public Press."
- School Review 50: 107-11; February 1942.
 ITCHELL, MORRIS R., and OTHERS. "Youth Has a Part to Play." Progressive
- MITCHELL, MORRIS R., and OTHERS. "Youth Has a Part to Play." Progressive Education 19: 87-110; February 1942.
 MYER, WALTER E., and Coss, CLAY. Education for Democratic Survival. Washington,
- D. C.: Civic Education Service, 1942. 264 p.
- 65. NATIONAL COUNCIL FOR THE SOCIAL STUDIES. The Social Studies Mobilize for Victory. Washington, D. C.: the Council, a department of the National Education
- Association, 1942. 16 p.

 66. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "The Nation's Schools after a Year of War." Research Bulletin 21: 27-55; April 1943.

 67. NATIONAL EDUCATION ASSOCIATION and AMERICAN ASSOCIATION of SCHOOL ADDRESS OF A PROPERTY OF A PROPERTY OF THE PROPER
- MINISTRATORS, EDUCATIONAL POLICIES COMMISSION. Education and the People's
- Peace. Washington, D. C.: the Commission, 1943. 61 p.
 68. NATIONAL LEAGUE OF WOMEN VOTERS. Know Your Town. Washington, D. C.: the League, 1941. 24 p.
- 69. NEWCOMB, THEODORE M. Personality and Social Change: Attitude Formation in a Student Community. New York: Dryden Press, 1943. 225 p.
- 70. NEW YORK STATE EDUCATION DEPARTMENT, BUREAU OF CURRICULUM DEVELOP-MENT. Wartime Emphasis in the Social Studies for Elementary Schools: Among the Warring Nations. Albany, N. Y.: the Department, 1944. 63 p. (Mimeo.)

- 71. NEW YORK STATE EDUCATION DEPARTMENT, BUREAU OF CURRICULUM DEVELOP-MENT. Wartime Emphasis in the Social Studies for Elementary Schools: Our
- Far-Flung Outposts. Albany, N. Y.: the Department, 1944. (Mimeo.)

 72. OGLE, PAUL G. A Survey of the Nature and Extent of the Use of Community Resources in the Teaching of the Senior High School Social Studies. St. Louis: Washington University, 1941. 103 p. (Master's thesis.)
- ORR, HARRIET K. "History Textbooks and International Attitudes." Social Studies 32: 254-55; October 1941.
 PICKLESIMER, PARNELL W. "Our Changing Geography." Journal of Geography 42:
- 266-71; October 1943.
- 75. Pre-Induction Orientation to Army Service: A Manual for Teachers of History and Social Studies, Cleveland: Cleveland Public Schools, 1944, 110 p. (Mimeo.)
- and Social Studies. Cleveland: Cleveland Public Schools, 1944. 110 p. (Mimeo.)

 76. Reed, Carroll R., chairman. Morale for a Free World. Twenty-Second Yearbook. Washington, D. C.: American Association of School Administrators, a department of the National Education Association, 1944. 461 p.

 77. Rehace, Kenneth J. "Wartime Adaptations in the Social Studies Program at the University of Chicago High School." The Councilor 5: 4-5; January 1944.

 78. Remmers, Hermann H. "Attitudes toward Germans, Japanese, Jews, and Nazis as Affected by the War." School and Society 59: 138-40; January 30, 1943.

 79. Riker, Britten L. "A Comparison of Methods Used in Attitude Research." Journal of Apnormal and Social Psychology 39: 24-42: January 1944.

- of Abnormal and Social Psychology 39: 24-42; January 1944.
- 80. SAPPENFELD, BERT R. "The Attitudes and Attitude Estimates of Catholic, Protestant,
- and Jewish Students." Journal of Social Psychology 16: 173-97; November 1942.

 81. Sherman, Mandel. "Attitudes of Youths of High School Age toward the War."

 Psychological Bulletin 40: 294-99; April 1943.

 82. Stowell, Margaret. "A High School Class Surveys Its Town." Journal of
- Geography 41: 179-85; May 1942.
- 83. TRAXLER, ARTHUR E. "Current Construction and Evaluation of Personality and
- Character Tests." Review of Educational Research 14: 55-66; February 1944.

 84. TROYER, MAURICE E. "Educating through Community Service." Toward a New Curriculum. 1944 Yearbook. Washington, D. C.: Department of Supervision and Curriculum Development, a department of the National Education Association, 1944. Chapter 4, p. 41-55.
- 85. Universities Committee on Post-War International Problems. Problems I-XV.
- Boston: the Committee (40 Mt. Vernon St.), 1943-44. 15 pamphlets. 86. VICKERY, WILLIAM E., and COLE, STEWART G. Intercultural Education in American
- Schools. New York: Harper and Brothers, 1943. 214 p.
 87. VITCHA, LEONARD A. "Wartime Social Studies in the Junior High School." Social
- Education 7: 315-18; November 1943.

 88. Walton, B. F. "Activities During the Session 1943-44 in Developing the Program of Secondary Education in Virginia." Secondary Education in Relation to War and Post-War Problems. Secondary Education in Virginia, No. 30. Charlottesville: University of Virginia, 1944. p. 3-9.
- 89. WARD, DOUGLAS S. "Strike One: Pupils Study Local Labor Dispute." Clearing
- House 16: 275-77; January 1942.
 90. Wartime Program in Social Studies for New England Schools—Recommended by a Group of Sixty New England Teachers. Harvard Workshop Series, No. 3. Cam-
- bridge, Mass.: Graduate School of Education, Harvard University, 1943. 34 p. 91. Watters, Hilda M. "International Relations for Secondary Schools." Citizens for a New World. Fourteenth Yearbook. Washington, D. C.: National Council for the Social Studies, a department of the National Education Association, 1944. p. 165-86.
- 92. WILSON, HOWARD E. "Developing Skill in Critical Thinking through Participation in School and Community Life." Teaching Critical Thinking in the Social Studies. Thirteenth Yearbook, Washington, D. C.: National Council for the Social Studies, a department of the National Education Association, 1942. p. 93-121.
- 93. WISCONSIN STATE DEPARTMENT OF PUBLIC INSTRUCTION AND STATE WARTIME STUDIES COMMITTEE. The Social Studies in Wisconsin Schools. Madison: the Department, 1943. 32 p.
- 94. WOODWARD, JULIAN L., and OTHERS. "Report of a Committee of the American Sociological Society on Wartime Adjustments in College Sociology Teaching." American Sociological Review 7: 849-52; December 1942.

Index to Volume XIV, Number 4

Page citations are made to single pages; these are often the beginning of a chapter, section, or running discussion dealing with the topic.

Adjustment, occupational, 313

Agricultural education, 327; effect of war, 331; evaluation, 328; guidance, 330; program planning, 327; teacher education, 330

American Youth Commission, 294

Arithmetic, commercial, 320

Attitudes, and instruction, 351; development, 348; influence of teacher on student, 352; social, 348; toward democracy, 349; toward war, 350
Audio-visual aids, 342

Business education, surveys, 323 Business machines, 322

Certification, of commercial teachers, 322; of teachers of industrial arts, 315

Citizenship education, 353

Civilian Conservation Corps, 294

Commercial education, 320; follow-up studies, 323; guidance in, 324; teachers, 322

Community, and school, 354; and school cooperation, 307

Community resources, 353

Consumer education, 301, 320

Contests, agricultural, 332 Core course, defined, 290

Curriculum making, for postwar period, 356

Democracy, attitudes toward, 349; in family life, 304
Diet, 305

Excursions, school, 341 Exhibits, agricultural, 332

Family relations, 302 Fused course, defined, 290

General college, 290; program, 291 General education, 289, 351; needed research, 296 Geography, effects of war on, 358 Graphs, 340

Home and family life, analysis of needs, 301; curriculum, 301; education for, 303; effectiveness of education for, 305 Home arts, clothing, 306; curriculum, 307; foods, 305 Housing, 311 RE

Vis

Vo

Vo

Vo

Industrial arts, 311; administration, 315; certification of teachers, 315; effect of war, 315; evaluation, 312; teacher education, 314; work experience in, 313 Intercultural education, 349

Maps, 340 Morale, measurement of, 350

National Youth Administration, 293 Needed research, general education, 296; work experience, 295 Negro education, industrial education, 311 Nutrition, 302, 305

Office practice, 320
Out-of-school youth, agricultural education, 329

Participation, in social education, 353
Postwar problems, 356
Preinduction training, in social studies, 355
Progressive Education Association, 290
Propaganda, 352

Reading ability, and social studies, 343 Regionalism, in social studies, 338

Safety education, 311
Shorthand, 320
Social education, 348; participation in, 353
Social studies appropriate 327, effect of

Social studies, curriculum, 337; effect of war, 354; evaluation, 343, 344; excursions, 341; methods, 339 Synthesis, attempts at, 290

Teacher education study, 354
Teachers, influence of attitudes on stu-

dents, 352
Textbook, influence on attitudes, 349
Time concepts, in social studies, 340

Trade analysis, 313 Typewriting, 322 Visual aids, 342
Vocational education, 313; curriculum, 314; need, 312
Vocational guidance, need, 314
Vocational opportunities, postwar, 304

War, effect on agricultural education, 331; effect on industrial education, 315; ef-

fect on nutrition education, 302; effect on social studies, 354 Work camps, 294 Work experience, 293, 294, 308; needed research, 295

Youth work programs, 293